Shaw Fellowship Lectures—1879.

ON

THE PHILOSOPHY OF KANT

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ON THE

PHILOSOPHY OF KANT

BY

ROBERT ADAMSON, M.A.,

PROFESSOR OF LOGIC, OWENS COLLEGE, MANCHESTER,
FORMERLY EXAMINER IN PHILOSOPHY IN THE UNIVERSITY OF EDINBURGH

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1879

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PREFATORY NOTE.

In the Deed of Foundation of the Shaw Fellowship it is provided that "it shall be in the power of the Senatus Academicus of the University of Edinburgh to require the holder of the Shaw Philosophical Fellowship, during the fourth or fifth year of his tenure of it, to deliver in the University of Edinburgh a Course of Lectures, not exceeding four, on any of the subjects for the encouragement of the study of which the Fellowship has been founded." In accordance with this provision, the following lectures were delivered in the University of Edinburgh on four successive days in January 1879. They are now published, partly because it seems appropriate that lectures delivered on a University Foundation should be made public, and partly with the hope that they may serve as some slight contribution towards the study of Kant in this country.

Advantage has been taken of the interval between the delivery of the lectures and their publication to revise them and add a few notes and references. No material alterations have been made, but certain passages, specially in the Third Lecture, which were necessarily omitted on delivery, owing to want of time, have been reinserted.

For careful revision of the translation contained in Appendix II., I am under obligations to my friend, Dr. Herman Hager, Lecturer on German in the Owens College.

ROBERT ADAMSON.

THE OWENS COLLEGE, MANCHESTER,
August 1879.

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LECTURE I.

INTRODUCTORY: THE GENERAL PROBLEM OF THE CRITICAL PHILOSOPHY.

No fact in the recent history of speculation seems of more importance in itself or of greater significance for the future than the revived study of the Kantian philosophy.[1] Resuscitations of earlier thinkers are not, indeed, uncommon, and at no time more than at the present has historic inquiry busied itself with the accurate statement and careful criticism of past systems. But it would be a mistake to regard the revival of Kantian studies as having merely historic aims in view. Doubtless, in that revival much must be done, and has been done, towards clear exposition of Kant's peculiar thoughts, many of which require to be rescued from the obscurity and neglect into which they have been allowed to fall. Nor is such 'philological' work without its special value and importance.[2] But the movement has a much deeper origin and a wider significance.

The return to Kant must be regarded as return to a mode of stating and viewing the problems of philosophy which appears to stand in peculiarly close relations to our present needs, and from which advance to a new solution may at least be looked for.

We know that every age has its own method of approaching and contemplating the problem of philosophy. The fact of return on our part to the position of an earlier thinker is, therefore, significant enough to demand that the reasons for such a movement shall be carefully scrutinised. It seems to me that we are able to trace two distinct lines of influence which have united in compelling philosophic thought again to contemplate the speculative problem in the form given it by Kant. One of these influences has been more particularly prominent in English thought, the other among German writers. To characterise them very briefly, it may be said that the return to Kant on the part of English philosophy is but the logical result to which penetrating criticism or the natural development of its principles must inevitably lead; whereas in Germany the movement has been largely due to the pressure of speculative difficulties on scientific thinkers, who have felt the necessity for a thorough investigation of the principles on which scientific cognition rests. Ultimately the two influences coincide, just as ultimately science and philosophy have the same aim, and express the same tendency;[3] but the fact of their co-existence, and specially the nature of the second, seem to me to deserve particular attention, and to be more than commonly significant.

The mode of thought which may be regarded as typically English, that familiar to us in Locke, Berkeley, and Butler, is marked by its meditative and practical character. It has shown itself unwilling to develop its own principles to their logical conclusions, and able to hold together in unanalysed unity doctrines radically inconsistent. Penetrated with a sense of the limited and finite nature of the individual, it has delighted to dwell upon the narrow bounds of human knowledge, and seems incapable of contemplating the possibility of rationalising experience. As a natural consequence, the method of English philosophising has been the psychological; metaphysics has come to mean an examination of the contents of the individual consciousness. So far as empirical psychology is concerned, the results have not been unfruitful, and they have at least the merit of having prepared the way for the critical consideration of knowledge which cannot be given by psychology, but to which psychology, like any other study of experience, must itself be subordinate.

Characteristic of this psychological method, naturally resulting from it, is the manner in which English thought has endeavoured to rest content with the concrete contingent fact of experience. Even in Berkeley, through whose lucid expositions one can ever and again trace the presence and influence of principles, the significance of which is not at first apparent, the world, so far as our intelligence is concerned, was regarded as contingent in itself and arbitrary in its connections. There *was* experience; a Divine Spirit who gave it, and a finite spirit who received it. The world of experience was but the manner in which the finite subject was affected by the Supreme Mind. A theory of subjective or theological idealism, apparently so simple, manifested its incoherence and incompleteness so soon as it was attempted to remain faithful to the principle which lay at its foundation. Grant only the finite spirit, with particular detached ideas or facts of experience, known in isolation, and no ingenuity can escape the phenomenalism of Hume. To remain within the position of subjective idealism proved itself a logical impossibility even for Berkeley himself. The experience which he regarded as throughout contingent, was for him, as it must be for any one who will critically consider it, intelligible only through principles which are not in the isolated facts as subjective idealism would have them. Were it possible that these isolated facts, these ideal atoms, should be known as such, then the conclusion is inevitable that thought can never transcend them, can never connect them otherwise than contingently, if at all. The individual spirit becomes but the theatre on which ideas appear, and from which they disappear; it knows not whence they come, nor whither they tend, nor what they signify. Berkeley, it is true, contrives to unite with this view of the absolute contingency of experience, a contingency in which the finite spirit must itself disappear, the higher notion of the finite spirit as having a certain filling in or content of the rational or necessary, and the successive stages of his philosophical conception mark the increasing clearness with which he recognised the presence of the second element.[4] The two views, however, are logically incompatible, and cannot be reconciled. With full meaning one may say that Hume is the true result of Berkeley. The results of Hume's speculation are but the necessary consequence of the assumption with which Berkeley and English thought begin their constructive work in philosophy, the assumption that experience is a given fact, consisting of individual isolated elements, cognised in their isolation. In Hume the rational and empirical elements which Berkeley obscurely united stand out in clear opposition, and the final step is taken when the general or universal element is regarded as the contingent psychological result of the particular and phenomenal. The finite spirit itself, with all its content, becomes one of the contingent unconnected facts of experience. It does not require to be pointed out at length that in Hume the results of speculation are destructive of the very principle from which speculation started. Ultimate contingency is a more positive conclusion than it was open to Hume to draw. The unconnectedness of phenomena, which must be thought as absolute, is for intelligence equivalent to the ultimate non-existence of phenomena.[5] Here, then, in Hume, we have the infallible sign of abstractness or onesidedness of principle. English thought, working along the lines laid down by Locke, has, by a natural development, led to the problem with which the Kantian philosophy takes its start. How is it possible that the finite subject should have experience at all? The subject has been supposed to have a quite adequate, though arbitrary, knowledge of isolated facts, but we have still to ask, What is meant by knowledge of a fact? Until this be answered no further speculation can possibly be fruitful; nor can any amount of examination of the "contents of mind" explain what is involved in the examination itself. The answer, when fully worked out, may show that on certain deeper questions of metaphysical import the results of German and English thought come nigh one another; but any such similarity of result is of indefinitely small significance when compared with the profound difference of method by which they are reached.

The movement towards Kant originated, as I said, not only within the limited sphere of philosophy proper, but in the wider sphere of science and the ordinary consciousness. That this should have been so, seems to prove with peculiar evidence that the return to Kant is due to pressing need for some mode of regarding the perennial problem of philosophy which is suited to the special wants of the present stage of thought. The rapid development of the physical sciences has not only brought their results into apparent conflict with the ordinary principles of thought and conduct, but has roused attention to the ultimate notions involved in scientific procedure as such. It may be said that to a certain extent physical science has recently changed its categories, and scientific thought, operating with new ideas, has come in contact with problems, possibly quite beyond their reach.[6] The progress that has been effected in the general reduction of all physical processes to mechanical law, and the extension of mechanical relations to all departments of external phenomena, at once bring into prominence the questions as to the ultimate significance of the idea of mechanism, the warrant for its application to any phenomena, and the limits within which it may be employed. Mere experience of certain mechanical connections among phenomena cannot permit us without further investigation to affirm that all phenomena whatsoever must be explicable in like manner. To justify the method of science at least two things are requisite: the general assumption or hypothesis that nature is intelligible, and proof that the only intelligible relations among the phenomena of nature are purely mechanical.[7] No amount of scientific observation can be adequate to these requirements, and that for two reasons. In the first place, by such means we should at best only approximate towards a general principle; and in the second place, no scientific observation is possible save under the assumption of the general rule itself.[8]

Not only, however, has it become clear that without critical investigation of our scientific conceptions no result attained by their means can have any real value or ultimate significance for thought, but it has become increasingly evident that the results themselves suffer from inner contradiction, and stand, to all appearance, in complete opposition to other principles of thought and action. With their help alone we cannot hope to explain consistently all the phenomena of experience, unless indeed our conceptions of these phenomena are radically altered. The idea of causal connection, for example, as applied with valuable results in physical science, and as stated in modern form, prevents any possible scientific explanation of consciousness as such, and if developed rigorously would lead to, the scientific denial of consciousness.[9] The old antinomy, which was so fatal to the fresh metaphysical efforts of Cartesianism, has reappeared in its crudest form. The conscious subject, with subjective states, stands opposed to a physical universe in which he can have no part save by violating the scientific principle of energy; just as in Cartesianism, thought could not intervene in the extended universe with its constant quantum of motion.[10] Either, then, thought, as such, must be regarded as in its very essence physical, *i.e.*, as an object of external observation—a kind of *contradictio in adjectis*—or the idea of cause in its modern acceptation must receive qualification. It is not possible, to take another instance, that we should continue to regard physical facts as the cause or ground of the phenomena of consciousness, and at the same time hold that our knowledge is limited to such phenomena. One or other of these views must be given up, or we must endeavour to gain a position from which a reconciliation of such antinomies is possible.

Now the presence of such unsolved contradictions in the development of a principle apparently sound—and the two noted are not by any means solitary—is clear proof that the principle itself is one-sided or abstract. Such consequences invariably show that general explanation or explanation of a whole has been sought in what is but one aspect of the whole, and that for complete solution return must be made to the organic unity of which the principle in question is but a part. If we are with any safety to apply the mechanical conception, we must accurately investigate its nature and origin, and be able to show how and why it applies to phenomena, either as a whole or partially. In other words, we require to determine the place held by the idea of mechanism in the completed whole of experience; we require a criticism of the principles of knowledge; and for such criticism scientific thinkers with increasing unanimity refer to the Kantian philosophy.[11]

There is certainly an historic reason for reference to the critical philosophy rather than to any of its successors. For the natural sciences have, since 1848 at least, pursued their way not only in entire independence of general philosophy, but with more or less open opposition to it. In or about that year the stream of speculation which had been started by Kant seemed to come to a standstill. Up to that point there had been continuity of development; since then, efforts after a completed philosophic conception have been fragmentary and without definite plan. It may be said, with Zeller,[12] that "philosophic activity had for a time exhausted itself in the systems which in quick succession followed from Kant to Hegel and Herbart, and that the need was felt for collecting, criticising, and working up the new material which had been thrown out in such profusion;" but it requires specially to be pointed out that at this period, one otherwise of much intellectual and political fervour, the best thinking seemed to have given up in despair the problems of pure philosophy, and to have thrown itself into the work of the empirical sciences. The cause of this has been sought in the increasing discrepancy between the results of pure or philosophic thought and experience, a discrepancy felt not only in the department of natural observation, but in politics and religion. It is not to be denied that much of the so-called *Natur-philosophie*, specially of Schelling, and in a less degree of Hegel, was well calculated to cast discredit on philosophy proper, and that to all appearance the last-named thinker did attempt what Zeller calls an "*a priori* construction of the universe."[13] Without meantime raising a question as to the accuracy of this interpretation of Hegel,[14] I may point out that no such opposition between metaphysic and natural science was to be found in Kant.[15] Of all pure metaphysicians he stands in the closest and most intimate relations to the researches and methods of natural science, and it lay, therefore, in the nature of things, that when a resort to philosophy was felt to be imperative if the notions of scientific method were to be justified, the return should be to the Kantian system rather than to any of its successors. Whatever results that system may have led to, it was in the first instance an examination of the nature and validity of the principles which are applied in the construction of science, and consequently claimed no place within science itself. "The philosophy of Kant," says Helmholtz,[16] "did not contemplate any increase of knowledge through pure thought, for its supreme principle was that all knowledge of reality must be gained from experience, but only purported to examine the sources of our knowledge and the degree of its validity, an inquiry which no age without harm can decline to enter upon." In other words, according to Kant, the indispensable portion of philosophical system is transcendental logic, the analysis of the conditions on which our cognition depends, or critique of the whole faculty of knowledge. Empirical research is doubtless possible without this logic, but no application of the results of experience can be made, nor can we feel assured of the objective worth of our procedure, until the problems of such logic are solved.[17] Only by means of such critical investigation can the limits of our knowledge be discovered, and to define the limits of a notion or principle is to determine its legitimacy and objective worth.

In another respect, also, the Kantian philosophy appears as peculiarly fitted to effect the transition to a renewed examination of those questions which are raised both by metaphysic and by science when pushed to its ultimate conclusions. The ideas within which that philosophy moved were not so removed from those of the present age as to place any marked barrier between them. Philosophy is, and must always be, affected by the general current of thought, of which it is but the highest and purest expression, and the fundamental changes of view which disclose themselves in the course of history render it impossible for the ideas of earlier systems to be adequate to the wants of later times. Problems once important lose their significance, questions require to be re-stated, and the divisions of philosophical system assume new forms as our general conceptions of humanity and its surroundings change, and become deeper and truer. The consciousness of man develops not solely by inner reflection, but by participation in the general stream of the world's progress. It is, perhaps, peculiarly characteristic of the philosophic efforts of the present age that they should be largely determined in aim and method by reference to current scientific ideas; nevertheless, great as have been the advances in scientific thought since the time of Kant, it cannot be said that there is much now before us fundamentally differing in principle from what lay before him. The views as to the antiquity of the human race, our knowledge of the slow progress by which the general human consciousness has advanced from its primitive stages, the theoretical proof of the origin and probable extinction of this physical system, the hypothesis of the evolution of man from lower organic types and of all organisms from inorganic substance—these ideas, which seem to demand some change in our philosophical conception of man and his position in the universe, were all, in one form or another, present to Kant, and in special connection with some of them his own peculiar doctrines were wrought out. It might at first sight appear that the conception of man as but one of the organic formations thrown up at a particular period in the long evolution of an infinite physical universe, moulded by the forces which brought him into being, and with all the filling in of his consciousness—his science, his ethics, and religion—due to the pressure of this external system, was the very antithesis of the Kantian conception of man as the thinking agent, the forms of whose thought are the conditions of experience, with the consciousness of a supreme law of duty connecting him with ultimate intelligence, and endowed with freedom to regulate his conduct thereby. Yet the facts on which such a doctrine rests were by no means foreign to Kant. In his early scientific work (*General Theory of the Heavens*) he traces the whole genesis of the cosmical system as we now know it from the primitive chaotic or gaseous condition, explains by mechanical principles solely, and emphasises strongly the dependence of man on nature. He has speculated on the origin of the human race, on the mode by which the motives of ethical right gain recognition in consciousness, and on the mechanism necessarily involved in organic life.[18] Nor were the principles of his scientific work ever thrown aside as belonging to a field of observation foreign to philosophy. No one ever held more firmly the balance between empirical and speculative ideas, or strove with fuller consciousness of both to gain the point of view from which their ultimate harmony might become apparent. What definite position Kant holds with regard to what may fairly be called the leading ideas of modern science will be seen later on; it is sufficient, meanwhile, to have drawn attention to the fact that these ideas were fully recognised by him, and that his philosophy must be understood as having definite reference to them.[19]

Now the question which is brought into the foreground in the development of these diverse lines of thought, though stated variously, is in truth the one problem with which philosophy as such is ever concerned—the relation of the individual subject to the universe of existence. Whether we ask how knowledge is possible, or what place the human being occupies in the physical world, we are engaged with this all-comprehensive problem. No philosophic system has ever done more than render possible a deeper glance into the nature of this relation; the history of speculation is but the slow evolution of man's conception of his own nature. It is for this reason that philosophy so faithfully reflects the general culture and knowledge of each stage in the progress of humanity. The forms under which the ultimate problem presents itself to any thinker or generation may vary, but the burden of the problem remains the same. To Kant the aspects of the question were due to the previous movements of modern philosophy, for the specific oppositions of thought which he had to reconcile were exactly such as had appeared in Cartesianism, and had been brought into sharper contrast by the development of the Cartesian principle.[20] A brief statement of them is necessary in order to bring out the peculiarity in the Kantian method of dealing with them, for it is the Kantian method of approaching the fundamental oppositions of philosophical conception that has greatest value for present thought.

(*a.*) The individual subject is, in the first instance, related to the universe as to material of knowledge. The world appears to him in cognition, or, rather, part of his very substance is his cognition of the world of objective facts. Such a mode of expression, like natural thinking itself, seems to involve sharp distinction between the thinker and the universe thought by him, but the true place and significance of the distinction must not be overlooked.[21] Evidently the relation cannot be purely one of opposition or negation; the *universe* cannot be the material known minus the subject knowing. We cannot have an Infinite placed alongside of a finite as constituting the sum of things. Possibly it may become apparent that for cognition or knowledge, as such, this distinction is a necessary element,[22] but it must be noted that the problem of the theory of knowledge does not involve the absoluteness of the distinction. It is only needful to recognise that in cognition the individual is through thought related to the universe. The special modes of that relation, and the conclusions to be drawn from them, form the substance of the Kantian critique of Reason, in which the foundations are laid for answers to all the problems of practice or speculation.

(b.) In the second place, we have the problem as to the nature or mode of existence of the universe which is brought before us in cognition. We appear, at the first glance, to be in contact with a world extended, resistant, in ceaseless motion and change; a world of bodies; substances, in which we live, and move, and have our being. Yet Hume tells us[23] "This universal and primary opinion of all men is soon destroyed by the slightest philosophy, which teaches us that nothing can ever be present to the mind but an image or perception, and that the senses are only the inlets through which these images are conveyed, without being able to produce any immediate intercourse between the mind and thought." In more modern phraseology, though with no change of thought, all our knowledge is a knowledge of states of consciousness;[24] materialism and idealism are one. This psychological idealism has been regarded by many writers[25] as *the* outcome of Kant, but nothing can be further from the truth. Indeed, as Hume says, such a theory is reached by the "slightest philosophy." Were this the result of criticism, the machinery is laborious and unnecessary, constructed for much higher ends than it achieves.

Much of the value of Kant for present thought depends on the mode by which he endeavoured to demonstrate the one-sidedness and inadequacy of a theory which had thrown insuperable obstacles in the way of Cartesianism, and which led to strange results in the hands of Berkeley.[26] The Berkeleian subjective idealism and the Kantian transcendentalism are wide as the poles asunder. A subordinate form of this second problem is, historically, of so much importance as to demand separate notice. In the concrete consciousness of the individual thinker and agent there appears an opposition between the states of consciousness, properly so called, or subjective modes; and certain facts or states of consciousness, which are called objective, are regarded as common to us with other intelligences, and are sharply distinguished from the others, but with which, nevertheless, we have a quite peculiar connection. Experience gives us definite connections between the two series of facts—one called Body, the other called Mind. The apparently absolute opposition between these two, and the peculiar nature of their connection, have caused them to be selected as typical of the general opposition between the subjective thinker and the objective world thought. Kant has only treated indirectly of this problem, but the principles of his critique supply the point of view from which we can with fairness examine not only the facts themselves but the various theories in explanation of them.[27]

(*c.*) Finally, in the general question of the relation of the individual to the universe are involved these problems of ethics and religion which concern his nature and existence, not only as a subject of thought, but as a concrete living agent. The solution of these problems, such, *e.g.* as the mode of connection between the individual will and the orderly world of facts, the relation of the human individual moved by individual passions to the general law of moral order, can only be approached through the theory of knowledge to which they furnish the complement. These problems play a remarkable part in the Kantian system, and I shall have to point out, in regard to them, the specific relation in which they stand to the completed Kantian philosophic conception, and also the results to which Kant's analysis has been supposed to lead. For the so-called Neo-Kantians, with Lange as their chief, seem to view the *Kritik* as the theoretic demonstration of Positivism, as the rigid proof that the ideas of Duty, God, and Immortality, are mere products of the idealising or poetic faculty, useful as rules for conduct, but base-less as dreams. One of the main objects of these lectures is to show that no such severance can be effected in the Kantian doctrines, and that the leading idea of the theory of knowledge is at the same time the foundation of Kant's ethical metaphysics.

The method for approaching these fundamental oppositions of human thought must be given, as was above said, in the theory of knowledge. We must not, however, confound this with the naïve doctrine that philosophy must begin, as it ends, with an examination of the "contents of consciousness." Such a conception is fatal to all progress, and the very peculiarity of Kant is his rejection of this so-called psychological method. Before entering on the detailed consideration of his theory of knowledge, it will be well to indicate briefly how his method is distinguished from that of science or empirical psychology, and how, as a consequence, the speculative problem is approached from a new point.

In essence the methods of Science and Psychology cannot differ, for both are concerned with the nature and relations of objects known, with phenomena, and both, as a consequence, remain within the division into things known and subject knowing. It is evident that no principles drawn from examination of this sphere can afford completed explanation of the phenomena themselves, or can touch the deeper problem of the relations between the two factors which have been severed from one another. Only through some principle, not found in the phenomena, but added from without, *e.g.* that of the complete intelligibility of nature, can Science even come in sight of the speculative problem properly so called. Nor is Psychology in any better position. It treats, so far as it can, a particular class of known phenomena, for the most part in a descriptive manner; but no conclusion drawn from these facts can ever go beyond them, can ever explain the ultimate synthesis of self-knowing and phenomena known. Nay more, in so far as psychology continues to be a descriptive science, employing the methods of finite thought, and endeavouring to explain the natural laws of psychical phenomena, its results must be regarded as of quite secondary import for the ultimate doctrine of knowledge. And it is worth while noticing that all the conclusions from the physiology of the senses, which Lange[28] regards as furnishing confirmation of the Kantian criticism, lie entirely beyond and without its sphere. To place on the same level the propositions that Space and Time are conditions of intuition, and that colours, sounds, etc., are dependent on the structure of the organs of sense, manifests singular want of apprehension of the cardinal distinction of philosophy.[29] It is of interest for psychology to know those facts on which the peculiarity of sensations depends; but for the theory of knowledge the matter is entirely indifferent. Here we only inquire what are the conditions under which the subject can have the filling in of intuition, however that intuition may be constituted. We must not confound the conditions of this or that phenomenon with the conditions of knowledge of phenomena at all. The one belongs to Science or Psychology; the other to Transcendental Logic. Science and psychology must thus, per force, leave out of account the one fact which forms the burden of philosophy proper, the synthesis of things known, whatever they may be, and self knowing.[30] It is this transcendental logic which Kant substitutes for the older psychological method of approaching speculative questions,[31] and in the substitution lies his significance for the history of thought. In very general terms, the object of transcendental logic may be described as the complete analysis of self-consciousness, and the systematic evolution of all that is contained in the very notion of self-consciousness. It is true that at the first glance such analysis may appear too abstract to be in any way adequate to explanation of existence, and it is to be admitted that something of this abstractness clings throughout to Kant's treatment of the subject. But we must recognise that consideration of self-consciousness not only leads to the statement of the purely logical conditions of intelligence, but involves the whole filling in which is given in nature and in the development of thought. Even in Kant recognition of this concrete element, which in one of its aspects may be called the ethical and historical, is by no means wanting, and I hope to be able to show you that the restriction of view to the Kantian theory of cognition gives an altogether one-sided and insufficient representation of that system. At the same time, it is to be said that the historical element in its widest sense never received its full due at the hands of Kant, whose deficiency in the historic interest was remarkable. Imperfect, however, as may have been Kant's realisation of his own idea, he was yet the first who showed that the problems of philosophy must be approached through transcendental logic. He sketched the outlines and methods of this science, and by so doing opened a new era in metaphysical thinking. In order to consider, then, how the new philosophy stands related to more recent ideas, and how the systematic conception of metaphysics sketched by Kant affords a reconciliation of those oppositions which previous thought had brought into clear relief, it is necessary to analyse somewhat in detail the Kantian theory of knowledge.

Kant's Theory of Knowledge.

The manner in which Kant himself stated the problem of his philosophy does not at first sight appear identical with that above given, and, in truth, it is far from easy to find any one expression to include all that he contemplated. The historical conditions under which his system took shape and form naturally exercised great influence in determining his starting-point, and the formulæ which he gives as expressing the essence of his philosophic endeavours have direct reference to more than one previous theory. Even the classic question, "How are synthetic *a priori* judgments possible?" opens up only one aspect of the complete problem, and that one too limited in scope to be a fair representative of the whole. Without entering here upon a consideration of the various stages through which Kant's thought gradually advanced to the question so placed in the foreground of the *Kritik*—a consideration given in ample detail by Fischer, Paulsen, and Caird—it will be sufficient for my purpose to note the manner in which Kant stood related on the one hand to pure empiricism, as represented by Hume; on the other, to pure rationalism, as represented by Leibnitz. Throughout the *Kritik* these are the writers ever present to Kant's mind; and we may say that only unconsciously was he at the same time demonstrating how the abstract universalism of the Cartesian philosophy was to be overcome.

Developing originally from the pure rationalism of Leibnitz and Wolff, Kant, with special reference to the theory of knowledge, had come to a standstill in regard to *real* cognition. With Leibnitz he had held that pure thinking was in ultimate resort analytical, but such a view satisfied the requirements neither of mathematics nor of empirical cognition. In a somewhat confused fashion Kant for a time satisfied himself regarding mathematics, though on that point the expression of his doctrine is by no means precise. Occasionally he seems to approximate to the theory of hypothetical certainty, with which we are familiar in later uncritical empiricists, and which Kant himself rejected.[32] But he appears never to have been able to reconcile himself heartily to Leibnitz's deduction of truths of fact; above all, he could not identify real connection, connection of fact, with connection in thought. Reason and consequent he could not regard as identical with cause and effect.[33] The continuous pressure of this difficulty, the difficulty of accounting for real synthetical knowledge from the individualist point of view, is manifest throughout all the pre-critical writings; and in the remarkable letter of 1772 to M. Herz,[34] one can see that the starting-point of the new critical investigation was given in and by the definite formulation of the perplexity. Sketching to Herz the divisions of the proposed work on the *Limits of Sensibility and Reason,* Kant says:—"While reflecting upon the theoretical portion as a whole, and on the mutual relation of its parts, I noted that something essential was wanting, something which I myself, in my long metaphysical researches, and all others had left out of account, and which, in fact, gives the key to all the mysteries of metaphysic; for, I asked myself, on what rests the reference to the object of that which we call ideas in us?" In other words, we may say, Kant here asks himself, How can the subject *know* anything? Previously he had been under the impression that the subject by pure thought could construct a whole system of analytical truths, and that experience itself *gave* synthetic connection of facts. But so soon as the critical question was put, it must have become apparent that all analysis rests upon and presupposes synthesis, and that experience, as a mere succession of *given* facts (granting such to be possible), could never *yield* connection or synthesis, *i.e.* to say, reference to object. Pure empiricism and pure rationalism, he goes on to point out in the same letter, are equally inadequate as explanations of real knowledge. The one, we may so put it, gives no reality; the other gives no knowledge. Though Kant does not indicate the ground of this failure on either side, it is sufficiently clear that, out of the individual alone, whether individual state of consciousness or individual self-contained spirit, no multiplicity or difference can be obtained, and therefore no knowledge of real relations.

It is naturally of some historic interest to know how this question came to be suggested to Kant, and we have his own reiterated and well-known assertion that Hume was the occasioning cause of his new departure in philosophy. The fact that Hume's doubt with regard to the synthetic connection called cause and effect was the first means of rousing Kant from his earlier opinions with respect to synthesis in general, we must, of course, accept on Kant's own evidence, but it is abundantly plain that the course of his own reflections had led him to a stage at which perception of Hume's difficulty became possible. We are not to suppose that the change in Kant's mode of thinking was due to the historic accident of coming in contact with Hume's writings. These had long been known to him, but up to the period when the critical method first begins to make its appearance, say 1769-71, they had exercised no particular influence on his thinking. At that period, however, his earlier theory of knowledge had shown itself incapable of solving a quite general problem, a particular case of which he found stated with full consciousness by Hume.[35]

In opposition, then, to Hume, Kant had to show that the theory of receptivity as the one function of mind—a theory in essence identical with what was noted above as the principle of the psychological method—omitted the factor which alone rendered cognition of phenomena possible. A stream of conscious states, which to Hume makes up the substance of mind and experience, is to Kant pure abstraction, arrived at by thrusting out of sight the nature and significance of consciousness itself.[36] It may be possible to speak of such a stream, but it is impossible to regard it as matter of knowledge; it is not to be known on any terms by any intelligence. Thus, with regard to Hume's empiricism, the Kantian problem becomes the quite general question as to the conditions necessarily involved in knowledge as such. With Hume, Kant recognises the distinction between the individual fleeting elements contained in experience and the general thoughts which unite with them in order to form a coherent context; as against Hume he has to show that these universal elements are neither abstracted from the particulars nor surreptitiously added to them, but are necessarily implicated in the particulars, which, apart from them, become pure abstractions, things in themselves, empty husks of thought. It would have added much to the intelligibility of the *Kritik* had this general aspect of the problem remained ever in the foreground, for, as opposed to the rationalism of Leibnitz, Kant's expressions assume another and more limited form.

The metaphysical doctrines of Leibnitz rested upon a peculiar theory of knowledge. The insoluble contradictions in the metaphysical conception of the world of monads, each developing in perfect isolation from the others, yet in strict harmony with them, and united into system by the *Monas Monadum*, were inextricably interwoven with the erroneous theory of knowledge essential to pure or abstract Rationalism. The intellectual consideration of things, or the treatment of them by pure understanding, was regarded as the source of all metaphysical determinations in their regard, and understanding to Leibnitz was purely analytical. Sense, which seems to supply elements of difference for the blank identity of pure thought, was simply confused understanding, and its determinations were gradually cleared up or intellectualised by process of analysis.[37] Against this view Kant continuously advances the necessity of synthesis, the absolute distinction between Sense and Understanding, and the impossibility of knowledge apart from the external system in and along with which human consciousness develops. Much that is perplexing in Kant, much that is at first sight irreconcilable with his completed theory, arises from the persistent opposition to the Leibnitzian metaphysic and theory of knowledge. The distinction between Sense and Understanding, to take but one instance, is emphasised so strongly as to make it at times appear as if each was regarded by Kant as the source of a specific *kind* of knowledge; yet his general theory and his express declarations prevent us ascribing such a view to him.[38]

The question, then, How are synthetic *a priori* judgments possible? is but a special mode of expressing the quite general problem, How is knowledge itself possible? and the remark may here be permitted that much confusion is caused by Kant's apparent identification of the two modes of expression. It seems to imply a distinction in knowledge, as if synthetic *a priori* judgments form a special portion of cognition requiring special examination. In fact, the ground of the possibility of such judgments is the ground of the possibility of knowledge at all, and any contrast between the kinds of judgment must be regarded as, in the first instance, merely preliminary, a stage from which advance may be made to the complete solution. Such contrasts are extremely numerous in Kant, and they have given rise to almost incredible confusion. He contrasts, *e.g.*, the objectivity of judgments of experience, which rest upon the principle of *a priori* synthesis, with the connection of elements of experience which we may represent to ourselves through imagination. Such a contrast is more misleading than helpful, for we cannot become aware of the distinction otherwise than through consciousness of objectivity itself. And it is a serious error in method to suppose that the general consciousness of objectivity arises through contrast to supposed subjective connection of ideas. The objectivity in a causal connection, where the supposed consequent is actually realised in experience, as contrasted with the subjective imagination of a consequent which is not realised, is not in any sense the *objectivity*, which it is the business of the *Kritik* to investigate.[39] So also, we require to keep in mind the absolute universality of the *a priori* element in knowledge, otherwise we are apt to find an extreme contradiction in the severance made by Kant between judgments of perception and judgments of experience. His language with regard to the first of these is very distracting, but it only requires attention to discover that the difference is between two classes of empirical connections, connections between this and that fact in experience, and does not apply to knowledge as such. A judgment of perception is only possible in relation to an object already determined as such by thought, and the predicate expresses a certain subjective state associated with the perception of the object. Each is determined, and consequently stands, under the general conditions of knowledge, but the connection between them is not thought according to the rules of possible experience. That it should not be so is quite in accordance with Kant's doctrine of the contingency of facts. No real occurrence can be cognised save as an effect, but it is not necessary that *a* and *b*, two given facts, should be regarded as severally cause and effect. If, from empirical grounds, I am led to conclude that *a is* the antecedent which *b* necessarily involves, then I may raise the empirical connection into a connection according to the category of cause. All this, however, already presupposes the determination of objects of knowledge, and lies beyond the question which Kant has in the first instance to consider.[40]

It is so essential, however, that no misunderstanding should exist regarding the preliminary distinctions with which Kant makes his first approach to the problem of cognition, that it will be well to note here, though briefly, the official explanations of analytic and synthetic, of synthetic *a priori* and synthetic *a posteriori* judgments. In the analytic judgment the predicate merely explicates that which is implicitly contained in the conception (notion) of the subject. For such judgments nothing is requisite beyond the definite notion or sum of attributes with which we start. In all synthetic judgments, on the other hand, the predicate adds something not contained in the notion of the subject, and, on Kant's view, such addition cannot be given by understanding alone —which he seems at times to regard as purely analytic, mere identity—but by intuition bringing us in contact with real experience. If the intuition which serves as medium for connecting subject and predicate be empirical, given matter of experience, which may or may not be again *so* presented, then our judgment is synthetic *a posteriori.* Such judgments are really equivalent to the so-called judgments of perception. But if the intuition or element of real experience be in itself *a priori,* or pure form, *i.e.* be such as must always be presented, then the judgment is synthetic *a priori,* and expresses a connection of subject and predicate always and necessarily valid, an objective connection.[41]

It is plain that divisions such as those just given must occasion much confusion and ambiguity, for they tend to put out of sight the inner connection of the various modes of judging. One difficulty raised regarding them we may at once dismiss. Schleiermacher, with others, has maintained that the distinction of Analytic and Synthetic is merely relative, what is now synthetic may afterwards become analytic.[42] This is quite correct, and is admitted in so many words by Kant himself.[43] He was perfectly aware that with empirical concepts as the subjects, it depended on the formation of the concept whether the judgment were synthetic or not; in fact, the distinction cannot with any profit be applied to judgments expressive of empirical connections. It has relevancy only in reference to judgment as the primitive act of all cognition, or to the method of forming judgments at all; and, when so regarded, is at once seen to express a true and important distinction. But it requires to be noted (*a*) that on Kant's own showing, analysis as such, analysis in ultimate abstraction, is only possible through and after synthesis. The original act of all cognition is synthesis or combination. Only under condition of primitive synthesis can we have subjective analysis.[44] (*b*.) Synthetic *a posteriori* judgments are only possible through, and in conformity with, the conditions of *a priori* synthesis. It is true that when I say—to take Kant's own illustration—*This body is heavy,* I do not imply that the predicate heavy must always attach to it. In this sense the judgment has no universality or necessity. But I do imply that the predicate is connected *objectively* with the subject; connected according to the rules of a possible *a priori* synthesis, that of substance and accident or property.[45] The relation of these *a posteriori* judgments to cognition is never satisfactorily handled by Kant; it is, indeed, but one aspect of his curious view as to empirical contingency; but we must absolutely accept the fundamental proposition of his theory of knowledge, that empirical consciousness is only possible in relation to and under the conditions of pure transcendental consciousness.[46]

(*c.*) Synthetic *a priori* judgments in the highest sense are not in truth judgments that present themselves to us in experience. They are general formulæ, expressive of those conditions under which experience is possible. In actual experience I judge that this change or event has a cause, and Kant desires to show (how, will appear later) that cognition of an event or change, as such, is impossible, except under the condition of causal connection, *i.e.* the simple judgment involves the general condition formulated in the synthetic principle, *all changes are caused.*

With these preliminaries we may now proceed to the theory of knowledge. To Kant the essential fact in all cognition is synthesis; every judgment of experience contains synthesis.[47] Now the mere notion of synthesis involves of necessity (1) a manifold or multiplicity, which is combined; (2) a unity, to which, or by reference to which, it is combined; (3) the mode, process, or form of combination.[48] In the special synthesis of knowledge each of these elements must be able to be present in consciousness. The manifold here is the complex of sense presentations; the unity is the Ego or Self; the modes or forms of combination are the pure forms or rules of Understanding. In this synthesis, according to Kant, we shall find explained the peculiar *note* of experience, viz., connectedness of perceptions, or reference of individual presentations of sense to the unity of object or thing known; for the modes of the synthesis by which the given manifold of sense is reduced to the unity of self-consciousness are at the same time the modes of objective existence. Self-consciousness, in other words, is impossible apart from the orderly, systematic connection of phenomena which we call experience.

Taking in more detail this theory of knowledge, we shall note, without following the order in the *Kritik*, the ultimate elements in the synthesis; the subjective processes by which the synthesis is realised in our consciousness; and, finally, the objective significance of the synthesis.

(*A*.) The elements in the synthesis.

These are, briefly, the following:—1°, the manifold or multiplicity of special sense, the several sensations, mere stimuli, in themselves incognisable, not even *blurs* or confused representations of things; 2°, the forms or general modes in which this manifold is *received;* 3°, the forms under which the manifold so received is *cognised;* 4°, the unity of consciousness itself. Any single *perception*, cognition of an object, is possible only through the combination of these elements, and requires nothing beyond their combination.

It adds considerably to the difficulty of the *Kritik* that these elements, which have for our cognition no separate existence, should be handled separately; the *Æsthetic* dealing with the matter and form of sense or intuition, the first part of the *Analytic* with the forms of thought. Only in the deduction of the categories do we come fairly in sight of the full import of the Kantian theory of knowledge, and understand the nature and relations of the parts which are there put together. Kant himself more than once seems to forget that the parts, as parts, have no real or individual existence, and uses expressions with respect to them which fuller developments show to be absurd and impossible. Thus, to select one noteworthy instance, he speaks of the peculiar difficulty of showing how the categories are conditions of objectivity, seeing that *objects* can be given in intuition apart from them. Such a remark is only made in order to be contradicted; but it illustrates the caution with which the doctrines of the *Kritik* must be stated.[49]

Taking the elements in isolation, however, we have, first, the manifold of special sense or receptivity, and the conditions under which it can enter into the synthesis of consciousness. So far as synthesis is concerned, it is not imperative that the manifold should be furnished by sense or by senses like ours; but supposing it to be given only through sense, then, says Kant, it cannot be received save in the general forms, Space and Time. Space and Time cannot be abstracted from the facts of intuition, for no intuition is possible without them; they are therefore necessary, and prior to experience. They alone render possible the combination of the manifold of sense into the unity of object. Space and Time, further, though general, are not Notions, for they do not contain special spaces and times *under* them but *in* them; and they are given as infinite in quantity, a property belonging from its nature only to intuition, not to conceptions, which are always definite and partial representations (*i.e.* contain a defined sum of attributes common to many individuals). They are, therefore, pure *a priori* perceptions or intuitions, and render *a priori* synthesis in our consciousness at least *possible.*

Before proceeding further, it is needful to remark (*a*) that Kant is not here dealing with the psychology of space and time representations. The psychical elements involved in localisation are to his theory matter of indifference. The problem is purely general, or transcendental, or logical. Under what conditions can the manifold of special sense be received into the synthesis of consciousness, and woven into the context of experience? It will afterwards appear that the *a priori* character of Space and Time might be inferred from the part played by productive imagination in the construction of intuitions; and in a more detailed exposition it would be requisite to enter somewhat fully into the special relations between Imagination and Intuition.[50] The elements in the Kantian synthesis are so intimately connected that, for completeness of understanding, the exposition ought to start from each of them in turn, and demonstrate how the others are involved. (*b*) Though Time and Space are here spoken of as pure perceptions, as forms lying ready in mind prior to experience, it is to be carefully noted that in themselves they are simply conditions of the *possibility* of perception, that they are not originally perceptions, but only become so through synthesis or combination. Space, as an original perception, is *per se* impossible. It is only known *as object* through construction in it, *i.e.*, by combination of its manifold according to the general principles of synthesis. Apart from perceived objects or matter, space itself is not perceived. It only renders synthesis of intuition *possible*, while unity of consciousness is required in order to render it *real*.[61]

So far one aspect of the synthesis. But the stimuli of special sense, even in the forms of Space and Time, are not yet *objects* known. The senses give no representations of objects. Only through synthesis or combination of the manifold presented in sense, moreover, only through conscious synthesis, can we refer the scattered elements furnished by intuition to the unity of the object or thing. Now the act of synthetically uniting intuitions is, according to Kant, Judgment—and all judgment is the determination or qualification of an intuition through a general conception or notion. This, which appears somewhat abruptly in the early part of the *Analytik*, is one of the remarkable portions of the Kantian analysis of knowledge. We may express it in other words, thus :—Only through a general notion can the particulars of experience enter into the unity of self-consciousness (the *universal* is that which turns the many into one). The Ego, or logical unity, can receive content or filling in only under general forms—rules for possible experience. The essence of the act of cognition is the reduction of the manifold, or multiplicity, to the unity of consciousness through general notions. At present we do not ask how this reduction is effected, or what is its ultimate significance, but add, to complete the survey of the elements, that Kant, to his own satisfaction, discovers in the schemes of logical judgment the forms of these pure notions of the understanding, and is thus enabled to give an apparently exhaustive table or list of the possible modes in which the unity of self-consciousness is realised in the manifold of experience. These forms of combination or synthetic unity are the categories.[52]

The last of the elements which we have to notice is the supreme unity itself, or Logical Ego, the indispensable factor in all cognition, and consequently in itself, according to Kant, incognisable. It cannot be presented in intuition, cannot therefore be determined in relation to any category, is not an object of possible experience.

LECTURE II.

KANT'S THEORY OF KNOWLEDGE.

At the close of last lecture I had stated briefly the several elements which, according to Kant, make up the organic unity of Perception or real Cognition. We require now to consider how these elements are subjectively put together, *i.e.*, how cognition arises out of their combination, and what is the objective significance of the connection.

(*B.*) How the elements are subjectively brought into combination.

For Intuition or apprehension of an object there is necessary not only receptivity, whether material or formal, but conjunction or synthesis of the several facts apprehended. All intuitions consist of parts, combined into a whole or unity. Now this synthesis of apprehension is not given by sense itself, nor by the pure forms of sense, which only render such synthesis possible. To the individual, isolated, or disconnected elements, supplied through special sense, there must be added the functions of Imagination and Understanding. An isolated fact of sensibility, an impression, is by itself incognisable, unperceivable. For cognition we must have difference or plurality, together with consciousness of unity in the act of combining or grasping together this plurality. Every act of perception, then, involving synthesis of apprehension, involves also Imagination.[1] Imagination fills up, as it were, the complete picture, or representation of the object, from the stimulus of special sense, and thus enables the given fact to become matter of knowledge.[2] But in such filling up or supplementing it is necessary that the represented elements be connected with those presented in sense by unity of consciousness in the act of combining. I must be aware that the whole intuition, partly presented, partly represented or imagined, is *mine*. Imagination, therefore, cannot work at random, but is so determined as to contribute only what shall be capable of entering into the unity of consciousness. But, as we have already seen, nothing can enter into the unity of consciousness save as determined according to a general rule or in accordance with a category. Thus Imagination fills up or supplements the stimuli of sense with reproductions of elements of possible experience in accordance with a category, or in such a manner that the whole intuition is determined in relation to a category. Nor is it difficult to see how Imagination, which is in itself sensuous,—dealing with intuition, not with thought—comes to have this power of rendering experience possible. For all our intuitions must, in the first instance, belong to Inner Sense, *i.e.*, be *for me*, and be under the form of Inner Sense, *i.e.*, Time; consequently, the modes in which unity of consciousness in the manifold of Time is possible, are at the same time the conditions under which experience at all is possible. Now these modes are nothing but the several forms of synthetic unity in the *a priori* intuition, Time itself.[3] The Imagination, then, determined by the understanding, constructs and must construct figurative syntheses or *schemata* corresponding in intuition or sensuously to the pure modes of synthesis cogitated in the categories. Not that the two faculties are distinct; "it is one and the same spontaneity which, now under the name of Imagination, now under that of Understanding, introduces connection into the complex of intuition."[4] All empirical intuition, all empirical consciousness, must be subject to the synthetic unity of Imagination, which thus mediates between Understanding and Sense.

Such, very briefly, is the subjective aspect of Kant's theory of perception. Special stimulus of sense requires supplement or completion from Imagination before it can be apprehended; Imagination, in order that its productions may be possible experiences, is necessarily restricted to such constructions as answer to the general forms of combination or categories, which are the acts of Understanding. Sensibility, then, with its synopsis or synthesis; Imagination, with its figurate syntheses or schemata; Understanding, with its pure notions, or laws, or forms, compose the psychological mechanism through which the Ego receives the filling in of experience, or, as we may otherwise express it, through which perception of an object becomes possible.[5]

Valuable as is this exposition in a psychological regard, it has, nevertheless, a tendency to bring into undue prominence the apparently mechanical fashion in which the elements of the Kantian synthesis are combined, and though in special references Kant is extremely careful to point out that the combination is organic or necessary, yet he frequently falls into the error of ascribing to the parts separately functions they only discharge when united with others, and never quite succeeds in freeing his theory from a certain aspect of externality or artificiality. The Understanding appears to seize upon and work up by arbitrary acts of its own material already formed, and it would seem that each human consciousness is somehow furnished with a psychical mechanism by means of which it depicts for itself, when excited from without, a world of real objects. This tendency to regard the problems of knowledge from the individualist or psychological point of view is, however, rectified when there is taken into consideration what I have called the objective significance of the synthesis.

(*C.*) The Synthesis objectively regarded.

Here the mode of viewing the problem of perception is in a sense reversed. In the subjective analysis, unity of self-consciousness had appeared as something known by itself and necessary in order to make cognition of objects possible. Now it is requisite to note that self-consciousness is only possible in relation to and through synthetic connection of the manifold in experience, and that such synthetic connection is precisely what we understand by the reference of representations to the object. In other words, Kant is here concerned to demonstrate that self-consciousness is only possible in and through an orderly system of experience, and that the laws or conditions of self-consciousness are the determinations or general qualities of real existence, so far at least as its form or ultimate intelligibility is concerned.[6] Although, then, his expressions may seem at times to involve the individualist assumption that experience is only the consciousness of the individual, Kant has here raised the problem to a higher stage, and his demonstration concerns not the conditions of this or that intelligence, but the conditions of intelligence as such. The subjectivism of the theory is apparent only.

No connection of representations or ideas—so runs his proof—is possible, unless all of them can be accompanied by the pure logical form of self-consciousness, *I think*. Consciousness of the unity and identity of Self is necessary for all representations, as otherwise they could not be *for me*, could not form parts of *my* experience. But just as unity is not, apart from difference, so consciousness of unity itself is only possible if difference, plurality, or manifold be given. The pure ego, or logical unity of self-consciousness, is itself analytical, mere identity. The manifold or given plurality is a known manifold, *i.e.*, must be subject to those conditions under which alone it can enter into the unity of experience or knowledge. The analytical unity of consciousness therefore implies synthetic unity of the manifold of experience. The modes of this synthesis are, we already know, the categories or pure notions of the understanding. No element of intuition can be cognised as such, can enter into the context of experience, except when determined in regard to a category or general rule of possible experience. But determination, according to a rule of possible experience, is precisely that in phenomena which we call reference of representations or ideas to the object. *Objectivity* is conformity of actual experience to the rules of possible experience. The synthetic connection, then, which we call union in an object, or the object simply, is nothing but the condition of the unity of self-consciousness in the manifold of experience. Without *object*, no unity of self. A judgment which expresses synthetic connection according to the rules of possible experience is an objective judgment, expresses a union of representations necessarily and universally valid. Thus the three facts, unity of self-consciousness as the condition of possible experience, the determination of intuitions according to the categories or pure notions, and the reference of intuitions to the orderly objective context of experience, are not three but one. They are but three aspects or modes of regarding the fundamental synthesis, which is perception or real cognition. This is the supreme principle of the Kantian theory of knowledge. All empirical consciousness is necessarily subject to the conditions of pure consciousness or possible experience, and these conditions are the pure forms of the thought of object in general, the categories.[7]

From this discussion, abstract in itself, and compressed almost to unintelligibility, there can now be obtained an answer to the question which, as we saw, was placed in the foreground of the *Kritik*. For us intuition is necessarily given, and the material so supplied cannot be cognised *a priori*. But no material whatsoever can enter into the context of experience unless formally determined, *qualified*, according to the conditions of the unity of self-consciousness. These conditions, then, supply the foundation for all the *a priori* knowledge which we can attain. As already indicated, synthesis in knowledge is, according to Kant, possible only through intuitions; for *knowledge*, there is requisite, not merely the thought of object, or pure form of combination of a manifold, but a corresponding intuition which shall prove the object to belong to possible experience. *A priori* knowledge, then, rests upon and expresses the determinations of pure intuition, according to the categories or ultimate modes of combination. But the universal form of all intuition, inner or outer, is Time. A complete system of the *a priori* principles of knowledge, will, therefore, be obtained by considering the manner in which productive imagination is necessarily determined with regard to the construction of intuitions and connection of perceptions in Time. As we have already seen, the function of pure imagination is to fill up or supply to the *stimuli* of sense the elements necessary, before they can be received into the context of possible experience. The forms in which Imagination works Kant calls *Schemata*, and its procedure *Schematism.* Only through *Schemata* do we have *a priori* cognition, for cognition requires the element of intuition, which is not to be found in the category, and the element of thought, which is not in the intuition. Thought and Intuition are organically united in the schema.

On the special modes of schematism, and on the synthetic principles deduced from them, I cannot now enter, but shall select for consideration the treatment of two crucial questions—the principle of causality and the doctrine of external perception. Before taking them up, it is necessary to note that Kant's manner of explaining the functions of schematism is extremely apt to be misunderstood, and to mislead. Schemata, according to him, are requisite because intuitions and pure notions are heterogeneous; since the one, therefore, cannot be immediately subsumed under the other. It would appear, then, that intuitions and notions stood apart from one another as finished products, and that their synthesis was a mechanical conjunction, effected by judgment, which subsumed the particular under the general. Such, however, is not rashly to be assumed as Kant's theory. We are not to suppose that the subsumption is mechanical; that the particular is something distinct from the universal. The union is organic; the particular is only the universal under a special form. The same function of synthesis, which in pure abstraction we call category, is, in realisation, the schema, and the intuition is not apart from the schema. The intuition is not cognised, is not *for us*, apart from the pure notion, but only in and through it. The junction, however, is effected through imagination, which, as we already saw, fills up the complete perception. Combination or synthesis, without which there is no knowledge, is not given in intuition, but the elements of intuition are combined by imagination according to the pure forms of combination. Thus synthetic combination is the common element in Understanding and Imagination, through which they coalesce in actual perception. In our cognition, where sensibility is purely receptive, the Imagination works in the pure forms of intuition or pure perceptions. Its schemata, therefore, are at once sensuous and general. The sensuous element, in order to be cognised at all, must have the aspect of generality, and this it receives in the schema. But we must on no account regard Notion, Schema, and Intuition, as three parts of perception which would exist in isolation. Only the category, or form of combination in general, Kant appears to say can be thought in pure abstraction.[8,9]

The possibility of misunderstanding on this essential matter arises mainly from Kant's over-anxiety to distinguish between Sense and Understanding, from the misleading analogies connected with the term *subsume*, and from the extreme laxity with which *Intuition* is employed. It is worth while recalling the fact that soon after the appearance of the *Kritik*, Kant's attention was drawn to the possibility of misconception regarding his doctrine through certain difficulties raised by that acute thinker, Salomon Maimon. Maimon asked how it could be shown that sense and understanding, which are quite heterogeneous, must of necessity harmonise, and how it was possible to think that the pure notions of the understanding should be laws for all objects whatsoever? To this Kant makes the brief but significant reply, that objects are merely phenomena, consequently, in one aspect at least, subjective, as being conditioned by our faculty of representation; while, on the other hand, they have *objectivity,* since they are united according to the forms of pure consciousness. Moreover, since we can have no experience which is not *so* constituted, intuitions not harmonising with the pure forms of thought are for us nothing. Of them we can have no knowledge whatsoever. In other words, we may say the harmony is not to be conceived as the uniting of two opposed and completed parts; the parts only exist *so* in the unity itself. The harmony, or organic union, alone has existence; the parts are merely aspects of the whole. The full import of this remark must be borne in mind when investigating the crucial instance of Kant's method, the explanation of causality.[10]

The discussion of this question is perhaps the most perplexing in all the *Kritik,* and that mainly from excess of explanation and illustration.[11] The real thought is overlaid with a mass of detail, under which it is with difficulty discovered. It seems to me clear that in the treatment of the Second Analogy Kant has throughout a double aim—*first*, to bring forward in perfect distinctness his conception of objectivity as orderly connectedness of perceptions; and *second*, to show that determined connectedness of perceptions in the sequence of time is the real counterpart, the realisation of the pure notion, causality. He takes infinite pains to explain and illustrate what he means by objective sequence, sequence in the object; and these illustrations, though entering into the main argument, tend to throw into the background the peculiar proof of the principle itself.

I shall, in the first place, state briefly what appears to me the essence of Kant's reasoning on this subject, and shall then comment on one or two of the difficulties originating in his mode of exposition. We have already seen that nothing can be combined in the experience of the Ego except under notions, the general rules or forms of intellectual unity. We have also seen that for *cognition* or perception an intuition is requisite in order to realise or give embodiment to the category, an intuition which shall show that the object denoted by the category belongs to possible experience.[12] We saw, finally, that intuitions are not immediately determined through notions, but through the schemata produced by imagination acting under the rules of understanding, for synthetic unity in productive imagination *is* understanding. Now among the categories or pure modes of intellectual function, there is one denoting the determined connection of objects in general as dependent, one on the other, the category of causality and dependence. If, then, this notion has validity in cognition, there must be somehow given an intuition which shall render necessary, and shall only be possible through the production by imagination of a schema corresponding to the pure connection of cause and effect. Something quite similar to this we find to be the case in the application of the other categories. Thus, *e.g.*, the pure notion, *Quantity*, has as its correlate extensive magnitude, or synthetic unity in the construction of intuitions by addition of like parts; (the schema, therefore, is *Number*). No intuition is possible save through this unity in the addition of like parts, because each intuition must be presented in Time or in Time and Space, and in order to fill a a definite portion of them, to be marked off from others, *i.e.*, to be perceived at all, must be constructed by the same act through which definite portions of time and space are constructed. This act is the act of Imagination determined by the pure notion Quantity, through which alone intuitions can enter into the experience of the Ego. The double mode of viewing this process—now from the necessity of an intuition to realise the category, now from the necessity of the category and its schema, in order that the intuition should be cognised—must be kept carefully in mind. The errors on the subject of causality generally arise from accenting the one to the exclusion of the other.

Taking, then, the problem of causality, we have, therefore, to ask, what perception can furnish the hint upon which Imagination produces the schema corresponding to the pure notion, or intellectual multiple, Causality and Dependence? Evidently the only perception in question is that of *change*. Dead uniformity or permanence, if a possible experience, would furnish no element for such a notion. The problem thus becomes, How is the perception of change at all possible? Looking at the matter quite analytically, we see that two conditions, at least, are requisite—(1) sequence of perceptions, for the new perception, to be known as new, must follow and be contrasted with another; (2) possibility of determining the position and relation of perceptions in time. But how is position in Time fixed? Not through Time itself, for Time is not known *per se*, nor does it give any fixity or means of determining *existence in time*. In order that any perception or perceived change should be determined as *existing in time*, *i.e.*, should be cognised *as* a change, it must be regarded as determined by previous phenomena in such a manner that, *these being given*, this must necessarily follow, or have existence. In other words, cognition of an event or change is only possible if the perception is supplemented by the schema of determined order in time according to necessary rule, *i.e.*, the imagination is necessitated to represent an undefined series of previous phenomena from which the present real fact of experience necessarily follows. Now this schema of necessary sequence in time is the sensuous correlate of the pure category, cause and effect. No experience of an event, then, is possible, unless imagination adds to the present intuition the representation of previous events from which this necessarily follows, and the imagination is necessitated to add this conception because in no other manner could perception of change in time enter into the experience of the self-conscious Ego. *All* changes, then, are subject to the law of cause and effect.[18]

The deeper aspect of Kant's theory of cognition is not at once apparent in this proof of the objective validity of the causal nexus. For here, as in the subjective analysis of perception itself (cf. pp. 48-9), the synthetic unity of consciousness is taken as something given from which to work out, and the inquiry is not directly made whether the connection of the parts of experience in time, according to objective rule, be not the condition of this supreme unity. Yet this is the manner in which we must contemplate Kant's proof. The connection of the parts of experience in the pure form of Time, apart from which consciousness of the unity and identity of self is impossible, is only through the pure notion of cause realised in the mode of determined sequence of existence in Time. Kant is, in truth, pointing, though obscurely, to an element of his theory which is never made quite so prominent as it requires, but recognition of which is indispensable to a consistent view of his activity. The consciousness of self is only in and through cognition of the object, and the object, or unity of experience, means determined existence and relations of existence of phenomena. The mediating fact, then, by which we connect the pure unity of consciousness and the empirical multiplicity of intuition in time and space, is the possibility of experience, or the complex of conditions within which subject and object arise in mutual opposition. The various processes by which, subjectively, the mediation is effected, are not to be regarded as more than mechanism, still less must they be taken as essential to the transcendental proof. The essential elements are (1) the necessary connection, one may say the identity, of unity in experience with unity of consciousness, (2) the necessity of external intuition, the *real* in experience, in order that such unity may be found.[14]

To this brief notice I may add the curious remark made by Kant as to the kind of intuition in which *change* can be perceived. This, he says, is only the perception of the motion of a body in space, just as the intuition requisite for the synthesis of substance and accident is external perception, intuition in space.[15] Kant, in making these remarks, appears to have been but dimly conscious of the problem necessarily raised by them, how can inner states, inner intuitions only in Time, be matter of experience? The consequences of the remarks are very significant for more than one doctrine both in Kant and in later writers.

The exposition under the second Analogy (*Kritik*, 173-187) has given rise to much dispute, originating, as I have above hinted, from the laborious manner in which Kant explains and illustrates what is indeed connected with his proof of causality in phenomena but does not form part of it. He is especially anxious to enforce his doctrine that determination of *existence* in time is distinguished from construction of an intuition which may or may not correspond to existence, simply by the thought necessity of order in the perceptions themselves.[16] In illustration he contrasts the successive addition of parts in the construction of the intuition of a house, which may be taken in any order, with the sequence of the perceptions in a real change, *e.g.* the motion of a boat on the river. The first succession then, he appears to say, is reversible, the second irreversible, and it has been thought that in this element is to be found Kant's proof of causality.

Irreversibility has been taken to mean necessary connection of the empirical facts. For instance, when the shining of the sun warms a stone, I am supposed to perceive that this empirical conjunction is irreversible, that the sun by shining must always warm stone, and then I subsume the particular sequence or pair of facts under the category cause. It must be borne in mind, however, that we cannot identify empirical conditions with conditions for intelligence as such, or for possible experience. Kant's contrasts are never, so far as I am aware, between successions of events which are irreversible and others which are reversible. To ascribe such a view to him would stultify not only his proof, but the very principle which he imagines himself to be proving. Whether or not that proof be satisfactory, we must at least understand Kant to be aiming at a universal principle—*all changes are caused*—and it is impossible for a moment to suppose that his demonstration rests on the basis of any number of felt necessities among successive phenomena as contrasted with other sequences which are not necessary.[17] I may add that the argument founded on this ambiguous distinction between reversible and irreversible is not borne out by Kant's examples. In two of these—the motion of the boat and the freezing of water[18]—the irreversibility in question is to be found, but neither is an instance of causal connection between the two phenomena whose sequence is irreversible. The previous position of the boat up the stream is not the cause of its position lower down; the liquid state of water is not the cause of its frozen state. Nay, the intuition which, according to Kant, is *the* type for perception of change, motion of a body in space, shows with sufficient clearness that the irreversibility of the elements of intuition has no application to this or that pair of phenomena, but to the quite general connection of *existences determined in time.* It is the characteristic of perceptions as opposed to the construction of intuitions. Kant himself deduces irreversibility from causal connection, or rather shows himself perfectly aware that determined sequence in time is only through causal connection.[19]

A further confusion is due to the contrast drawn here, as in the discussion on judgments, between the determined sequence of *perceptions* and the arbitrary play of imagination. Such a contrast is more misleading than helpful. If Kant only means that I can consciously represent to myself particular empirical facts as in any order, he draws attention to a mere peculiarity of reproductive imagination, which is possible only in relation to an order of events already thought as determined in time. The imagined facts are equally subject to the pure law of productive imagination; a remark which is quite borne out by the criterion Kant establishes as distinguishing mere dream-experience from reality. But if he mean that I can represent to myself events as altogether undetermined in time, he contradicts his own fundamental principle that imagination can only work within the conditions of possible experience; and such contradiction is not rashly to be ascribed to him. In either case the contrast has no bearing on the problem before us, for it can only concern empirical connections of fact, and these are contingent. *In no other way than by experience* can we discover whether or not the events which I represent to myself as cause or effect of given phenomena really exist. Illustrations drawn from this source must therefore be held as unconnected with the proof of the causal principle.[20]

I take next Kant's discussion of External Perception, recalling attention to the fact that in connection with the first Analogy the intuition brought under the schema of permanence in time, is declared to be the external intuition of that which fills space, or resists compression. The only substances known to us are extended resisting things in space; and all change is change in substance or manifestation of substance.[21] Now the idealism which Kant has in view when considering the problem of external perception rests on the principle that subjective states, determinations of my own existence in time, are immediately known, whereas the existence of matter or external things in space, is only an inference, and therefore problematic.[22] We are supposed to reason from existence known in us to existence of real things without, *i.e.* things in space, not things in themselves. Against this view Kant advances the following argument: The empirical consciousness of my own existence in time (not to be confused with pure consciousness) is only possible in relation to a permanent in time. Now external perception alone can give the intuition corresponding to the schema of permanence in time; consequently the empirical matter of external perception, or the empirical reality of things in space, is the condition for possible consciousness of my own determined existence in time. We have empirical consciousness of our own existence in time only in connection with the consciousness of an external system of things in space. The reality of external things, *i.e.* of matter in space, is just as certain as the reality of our own existence; the one is as immediately known as the other. Kant seems further to say that the arguments against the reality of external perception are altogether puerile. The only difficulty to his mind is the difficulty of explaining why we should have external intuition at all; and this we cannot hope to explain.[23]

The peculiarity in the above argument, as in the Analogies, is the reference to external sense as the indispensable condition of knowledge, and it leads us to notice that with regard to inner sense, or the cognition of Self as object, Kant's teaching is far from being clear. He rightly points out that we can only cognise ourselves as objects in connection with the world of things in space; but his reasoning, logically developed, should have led to the conclusion either that we cannot cognise ourselves as objects at all, or that cognition of self is not through the categories of the understanding.[24] On his own showing the determinations of my own existence cannot be cognised as objects, for we cannot apply to them the schema of permanence in time. Incidentally, indeed, Kant himself remarks that we conceive our inner states under the image of a line, and think their succession as the drawing of the line.[25] But these inner states are not substances; their origination, or passing out of being, does not involve any diminution or increase of substance in the universe.[26] As change can only be cognised in substance, these states are not cognisable as changes, for relation to a substance is not precisely the relation of accident to the substance which appears in the accidents. If not cognised as changes, are the inner states to be cognised at all? The truth is that in this special case, and throughout in his treatment of psychology, Kant wavers between the conception of psychology as an empirical science of inner states resembling physics, which he sees to be impossible, and psychology as a speculative science, tracing the subjective processes through which the pure thoughts or categories are realised in consciousness. Empirical psychology he will not admit to the rank of science; no *a priori* rational principles are attainable in it; we can only describe and classify facts. In short, psychology is for him a species of empirical Anthropology, or general descriptive account of human existence and culture.[27] His principles ought, however, to have led him farther, and we can judge from the critique of the *Paralogisms of Psychology* (specially as in the first edition) to what conclusion they really tended. The categories of Relation, Substance, Cause, Reciprocity, are entirely inadequate to determine the nature of consciousness. The pure form of all consciousness, the judgment, *I think*, affords no means of determining the nature of the soul or Ego as Substance, as Simple, as Personal, or as standing in relation to external things. An intuition is requisite if these categories are to be more than mere thoughts, but no intuition of self is given. At the same time the reasoning by which Kant reaches this result enables him to deal successfully with the peculiar form of materialism which would explain the phenomena of inner sense as results of external things, or as modes of matter. Such explanation, he points out with complete evidence, involves transcendental realism or the assumption that material objects as known are things-in-themselves. External phenomena are simply modes of our external intuition, and it is absurd to suppose that one class of our perceptions can account for the total content of consciousness. (In other words, things are only for intelligence; and intelligence, therefore, cannot be explained as resulting from them.) Whoever admits that material phenomena are only as they are known to be is for ever debarred from assuming them as the ground of consciousness itself. If it be supposed that the unknown somewhat which appears to us in the forms of external intuition is really the same as the unknown somewhat which is manifested in thought, and consequently that inner and outer are but the modes of appearance of one essence (for such a theory Kant contemplates), then the answer must be made that such a theory is possibly true, but is absolutely meaningless. Its truth can never be known, for the essence to which all is referred can by hypothesis never be known. To assume it as the identity of which inner and outer are manifestations, is a mere apology for incoherence of thought.[28]

The true conclusion from this laboured portion of Kant's theory is that briefly stated above. The categories which are supreme where merely external relations are concerned, fail of applicability when the nature of thought is to be determined. Only when we endeavour to determine our own mental existence as object—an impossible feat—does the discrepancy become apparent between the categories of external intuition and the world of self-consciousness. All the facts of experimental psychology (psycho-physics and the like) are to be received without hesitation. They may directly or indirectly throw light upon the manner in which, and the mechanism through which, consciousness expresses itself in man, but they do not in the least explain the supreme fact of consciousness itself. Here we have one well-defined limit to the idea of mechanism.

To sum up, then, Kant's theory of cognition in its positive aspect, knowledge is only possible through and under the conditions of self-consciousness, the laws of which prescribe to experience at least *form*. The matter of experience is not given by self-consciousness, but is received from without, and is, as contrasted with the formal laws of understanding, *contingent.* The highest conception in the sphere of cognition is that of a system of extended substances in reciprocal determination. Such substances are for us forces, repulsive and attractive, operating in space, and therefore with only mechanical or external relations. Thus the world of scientific cognition is the world of matter, force, motion, space, and time. The pure notions of the understanding, it is true, are forms of combination not restricted to the manifold of intuition, and by their means we may *think* objects other than those presented in experience; but unless intuition corresponding to such notions be given, our thought remains empty, and no increase of knowledge is gained. The limit of knowledge, then, is the limit of possible intuition.

Such a summary, though not in itself unjust, and though to all appearance supplying a completely satisfactory foundation for scientific empiricism, fails to bring into due prominence the deeper elements in Kant's doctrine, and robs of all significance his rich developments on the ultimate problems of metaphysic. For with regard to them it would seem to place us in the easy position of Agnosticism. We should be able to say that God, the soul, and immortality, are not possible objects of sense-intuition inner or outer, and consequently, that all determinations of thought with respect to them must be and remain pure fancy. Constrained by natural desire, or led by constitutional impulse, we may fill the world of the unknown with what forms we please, and such poetic constructions may have value for our life, but they, nevertheless, remain the work of fancy, and without other grounds we could have no other attitude towards them than the poet has towards his own creations. This demonstrated positivism has seemed to many the one and all-important outcome of the Kantian critique, but it is impossible to accept such a view. The statement of the theory of knowledge just given has no significance if severed from the fundamental idea on which it rests; it is but one part of a completed metaphysical conception, and by directing attention to this aspect of it we shall not only discover its deeper meaning, but be able to appreciate its relations to those higher problems to which its results have yet to be applied—problems which, under the first view, could have no existence. At the same time we shall be able to supply an essential element in the critical survey of the pure notions of science, for we shall point out negatively the limits within which they apply, and consequently determine their final value for human thought.

All that is *for us* is only in self-consciousness.

Beyond the synthesis of self-knowing and things known we cannot go. Self-consciousness is the ultimate unity or identity in reference to which it is possible for multiplicity or plurality to be known. The ultimate aim of all our researches, the discovery of unity of principle, of the general rule of which particulars are but the modifications or specialisations, is prescribed by this final necessity for reduction to the unity of conscious experience. Even in the methods of the empirical sciences we can trace the effects of this effort after completed explanation, for these methods have no other aim than to exhibit the conformity of fact to the ideal forms of completed system.[29] When we take into consideration knowledge as a whole and its conditions, and note that in it also there must be unity of conception, we are then able to discern the full significance of the categories. They are the modes or forms of unity through which alone particulars can be known as particulars. Self-consciousness is, if we may use the term, the supreme category, the final unity into which all the detail of knowledge must be reduced; the subordinate notions are the content, or filling in, or substance of this supreme form.

Now, the highest conception which Intuition and the categories of the understanding led is one quite incapable of satisfying the need for absolute unity of consciousness. A world of extended things, substances in reciprocal action, or determining one another, stands, and must stand, in merely mechanical or external relation to the unity of self, and even if internally a coherent conception, cannot be reconciled with the unity of self.[80] We are still driven to seek for some conceptions which will give harmony to our whole consciousness, and if we call Reason the faculty which, testing the finite notions of understanding, exhibits their partial and limited character, and endeavours to find the unity into which they may be resolved, then we may say that Reason is the faculty of the unconditioned. For the determined world of understanding may be aptly called the conditioned. Each part of it is externally, and through natural necessity, united to every other, and has existence through the others; it is a contingent aggregate. The forms of finite thought cannot explain the system to which they have given rise, cannot fill up the idea of a cognitive system under which Reason acts.[81] Reason, then, which discloses their inadequacy, is compelled to seek some higher solution.

It is true that Kant's peculiar mode of regarding the elements making up the synthesis of understanding led him to a statement of the problem in some respects differing from that just given. For, although he had once for all demonstrated the falsity of the individualistic or psychological view which would build up the structure of knowledge by the mechanical juxtaposition of isolated atoms, yet his own theory suffers from a quite similar defect. To him the ultimate synthesis was a purely external one. The Ego, on the one hand, was mere blank abstract identity, with no concrete filling in; the categories, empty forms of thought, with no specialisation of their own; the pure forms of intuition mere possibilities. The only reality, on the other hand, would seem to be furnished by the matter of intuition. Though Kant's theory of knowledge is precisely the proof that in itself ultimate reality is *not* given in the matter of intuition, yet he continually expresses himself as if this erroneous mode of thought were thoroughly justifiable, and states his doctrine on the assumption of its truth. Thus the inadequacy of the categories of understanding to systematic cognition, and the demand of reason for some higher unity, in which they may be harmonised, at first present themselves to Kant as the distinction between Phenomena and Things-in-themselves, or noumena. In the form or forms given by Kant no more perplexing distinction was ever drawn. The Thing-in-itself appears at every turn in the three *Kritiken.* The solution of all the higher metaphysical problems turns upon its nature as distinguished from phenomena, and yet it is difficult, if not impossible, to state Kant's precise position in the matter, and to reconcile his various expressions regarding it. Looked at in one way the doctrine of the Thing-in-itself rests on what may be called Kant's mechanical or psychological view of knowledge. External things are merely affections of mind, states of consciousness, disposed in space, which likewise is a form of mind. But these affections are set up by real objects, which naturally are incognisable in themselves, for they only rest upon us, but which nevertheless we must suppose to exist. It is to be remembered, however, when this account is given, that Kant in no way held the vulgar view which would explain or illustrate the distinction by referring to the physiology of the senses, or to the difference between colours and the vibrations of ether. Nor did he hold that behind each sense-intuition there stood a separate individual thing in itself. "It is," he says, "an altogether mistaken idea of the theory of sense-objects as mere phenomena, to which we must add something non-sensuous, if one imagines, or tries to make others imagine, this to mean that the supersensuous substratum of matter is divided into monads (or parts) as we divide matter itself; for in this case the monad (which is merely the idea of an unconditioned condition of the compound) would be regarded as in space; when it ceases to be a noumenon, and is itself compound."[32] It is evident from this that Kant's hazardous explanation of affection by impression on the senses is so far irreconcilable with his critical or transcendental method, and we can understand Jacobi's indignant complaint that without this doctrine one cannot enter into the critical system, and with it one cannot remain in it.[33] The manner in which the psychical mechanism brings forth intuitions has no bearing on the problem with regard to their nature as known, and Kant has elsewhere sufficiently explained his application of the category of cause to these things in themselves. The real thing-in-itself is the supersensible substratum of nature, which is certainly the *ground* of the phenomenal world, but the action of which cannot be known as causal. It is clear, indeed, that what Kant really had in view when he described objects as phenomena, was their essentially finite, limited, and incoherent character, and the question then becomes, How are we made aware of this limitedness of things of sense? By reflection, says Kant, on the distinction between Understanding and Sense, a reflection which we shall presently find also gives rise to the remarkable doctrine of empirical contingency, and leads to the most important consequences in the Kantian metaphysic. The categories, we have already remarked, are not limited to the combination of elements furnished by sense, but are forms of combination in general, thoughts of objects as such. We are thus irresistibly led, Kant thinks, to regard our world of sense as phenomenal, conditioned, and reason compels us to frame the conception of some unconditioned. This unconditioned, the conception of which is merely problematic, *i.e.* not in itself contradictory, but incapable of having objective existence demonstrated for it, we call noumenon. Noumena, clearly, cannot be the object of intuition such as we possess, for all such objects are conditioned. In a negative sense, then, they are *not* objects of intuition, and therefore positively may be described as objects of a non-sensuous intuition. Of the mode of operation of such a non-sensuous intuition we can form no idea, but the conception of noumena is valuable, nay indispensable, as marking the limited conditioned character of all the faculty of intuition which we possess. In fine, the conception of noumena, or things-in-themselves, is a limiting notion (Grenz-Begriff). We cannot assume the existence of such objects; through the mere conception of them we gain no extension of knowledge, nay, Kant seems sometimes inclined to assert that by the understanding we cannot *think* such objects. They are contemplated by us as objects of an intuition and understanding altogether distinct from our own. In this last remark, however, Kant has gone beyond his own theory. We do, and must, think these noumena, and we think them, through the only forms of thought given to us, the categories; *but* —and this is the real significance of the doctrine— critical investigation of our thought demonstrates that the categories are entirely inadequate to these noumena, and that contradiction is involved whenever we apply the finite notions of understanding to them.[84]

In this way I think we are able to see, at least partially, how the doctrine of things in themselves arises, and how it is related to the dialectic of Reason, on which Kant immediately enters. The faculty which subjectively expresses the demand of self-consciousness for perfect unity of conception we call Reason. Reason cannot find satisfaction in the conditioned, and any attempt to demonstrate complete harmony by means of the pure notions of the understanding, which are the categories of the conditioned, inevitably leads to inner contradiction and incoherence. If, then, we still seek an unconditioned which will unite self-consciousness to this world of conditioned objects, we are compelled to recognise, both positively and negatively, that these objects are merely phenomenal, are not things in themselves, are but the modes in which finite intelligence grasps the supreme unity of things. Positive proof for this has been advanced in the Æsthetic and Analytic, which showed that the content of experience was conditioned by, or dependent on, the nature of sensibility and thought. (Intuitions were received only in the forms of Space and Time; objects were cognised only under the categories of understanding.) Negative proof is furnished abundantly in the Dialectic, which shows that the notions of the understanding, competent to phenomena, land us in contradiction whenever we endeavour by their means to gain such a solution as shall satisfy reason.[85]

The Thing-in-itself, then, is no excrescence on Kant's system, nor does it play the part of that convenient receptacle for difficulties of thought—the unknown and unknowable. It marks the transition from understanding to reason, from the categories of relation or external necessity to the category of freedom or internal necessity. The further stages of Kant's thought are simply the closer determination of the thing-in-itself.[36]

At the same time, from the outlines of the positive theory of knowledge already given, one can see what kind of solution was alone open to Kant. Understanding, seizing upon limited aspects of an organic whole, and placing them in sharp opposition to one another, had left as final elements the abstract Ego, or pure form of consciousness, and the world of things in themselves. These two appeared to stand mechanically apart, and the world of phenomena was somehow the result of their reciprocal action. Nor could these elements be characterised otherwise than by merely negative predicates. (They resemble in this Schopenhausen's will and pure subject of will.) A unity, then, which shall take these up into itself as constituent parts could not but be for Kant something entirely separate from the world of phenomena, placed alongside of it, but not entering into it. So far, then, as we are yet able to judge Kant's final conception of the unity of reason, it could not rise above the finite category of reciprocity. At times, indeed, he does shadow forth a mere concrete unity, for he finds ultimate reconciliation in the notion of an intuitive understanding, an understanding in which the synthesis of general, particular, and individual, should be completed by the organic act of thought itself. With the thing-in-itself, of which, indeed, it is the real counterpart, the idea of a perceptive understanding is continually making its appearance throughout the three Critiques, receiving at each stage more exact determination, until it at length appears as the final unity, or supreme Mind, or God, the synthesis of intelligence and its objects, which we indeed are unable to grasp, and the possibility of which we cannot even comprehend. The intuitive understanding is the burden of all the critique of speculative theology, and the principle of the teleological judgment. Upon the idea of it we require to fix attention if we are really to understand Kant's position in metaphysic.[87]

The detached elements, then, for which reason seeks the unconditioned or possible ground of unity, are, in the first instance, the Ego and the world as determined by thought. To these, however, reason must add the unity of both in order to complete its architectonic idea. We have, therefore, three speculative unities, three transcendental ideas, as Kant calls them—first, the unconditioned unity of the subject of consciousness, the psychological idea; second, the absolute unity of the series of conditions of the phenomenon or thing known, the cosmological idea; third, the absolute unity of the conditions of the possibility of all objects of thought in general. As is well known, Kant, bringing forward into prominence the subjective function of Reason as discovering the principle from which the conditioned follows, and therefore as being essentially syllogistic in character, arrives at his threefold arrangement of transcendental ideas from a consideration of the three kinds of syllogism—categorical, hypothetical, and disjunctive. Without making any comment on this, which is a parallel to the earlier discovery ot the categories from the forms of judgment, I desire specially to call attention to the fact that the three ideas are simply the unconditioned application of the three categories of relation—substance, causality, and reciprocity, *i.e.* to say, the transference of the forms of scientific cognition to the domain of reason and metaphysic. By keeping this in mind, we shall more readily appreciate the nature and import of the criticism to which they are severally subjected. The result of the investigation is in a twofold sense negative:—1st. It is demonstrated that by means of these categories no final solution can be given to the problems of reason or metaphysic, and, accordingly, Kant thinks no metaphysic, as system of cognition, is possible; 2d. It is demonstrated that these categories have applicability only to the conditioned, and that no argument based on them can apply either way (either positively or negatively) to the unconditioned. If from other sources indications of an unconditioned are obtained or obtainable, the field is left open for them. To a metaphysic constructed by the employment of these finite categories, criticism is fatal; to a metaphysic otherwise founded, scientific cognition can bring forward no counter argument. As these categories are in particular the fundamental notions of scientific procedure, the results of Kant's criticism are here of peculiar value.

It is unfortunately impossible for me to enter at any adequate length upon the rich material for thought contained in the Dialectic. I must, perforce, content myself with such indications of the course of discussion in the three divisions as are requisite in order to lead up to the final idea of the Kantian system. The three divisions, as you are aware, correspond to the old metaphysical rubrics —Rational Psychology, Rational Cosmology, and Rational Theology.

On the first of these, in which the paralogisms of Reason are pointed out, something has already been said. The conclusions which Rational Psychology believed itself able to draw with regard to the immortality, immateriality, and simplicity of the soul, transcended experience, and consequently could be based upon nothing but *the* universal element in all inner experience, the unity of self-consciousness, the pure judgment *I think.* But when it is attempted to use this universal subject of thought as the third term by which to determine synthetically the nature of self as an object of knowledge, then we involve ourselves in paralogism. For synthetical determination through a category can only be given in relation to an intuition. The universal subject of thought is supposed to be, but is not, an intuition; nor is any intuition given in inner experience whereby we could determine the soul as substance. No *knowledge* then, in a scientific sense, is possible of the nature and future existence of the soul. Equally beyond knowledge, however, is the assertion that the soul cannot be immaterial or immortal. The category substance thus shows itself as entirely inadequate to the determination of the unconditioned. Spinozism, as a system of cognition, is impossible.[38]

LECTURE III.

METAPHYSICAL IDEA OF THE CRITICAL PHILOSOPHY.

At the close of last lecture we had entered upon the consideration of Kant's theory of Reason, the portion of his work which has most significance when we endeavour to comprehend the complete metaphysical conception of which the parts are being surveyed in detail. The ultimate aim of Reason had been determined as the systematic unity of cognition, in and through which the knowledge yielded by understanding might appear, not as a mere contingent aggregate, but as a connected organic whole.[1] Empirical knowledge is not, *per se*, in need of such systematisation; that is to say, science may and does proceed in its course without regarding the metaphysical problems inevitably raised when we endeavour to comprehend the sum total of experience itself. Nor does science itself ever of necessity lead to such problems as make up the substance of metaphysical inquiry. Incompleteness of scientific explanation is not to be regarded as identical with the apparent insolubility of certain questions regarding the nature of experience and our relations to it. Only reflection upon the notions employed in scientific cognition can lead us to see their limited character and can enable us to determine, at least in outline, what would be required by a metaphysical explanation properly so called.[2]

It had also become apparent that in seeking for explanation of experience itself, in seeking the unconditioned, we of necessity employed these conceptions through which unity was possible in experience. But in such a case it is evident from the outset that Reason is doomed to failure. It is not possible that notions which serve to explain the perception of one conditioned thing among others, which enable us to pass from one part of the world of empirical cognition to another, can be valid as means for cognising the unconditioned, the totality of experience. "The notions of reality, of substance, of causality, of necessary existence itself, have no significance for determining any object, beyond their service in rendering the empirical cognition of a thing possible. They may thus be used to explain the possibility of things in the world of sense, but cannot be employed to explain the possibility of the universe itself, since the ground of explanation for that must lie beyond the world, and consequently can be no object of a possible experience."[3] We explain by referring one part of experience to another; all our scientific notions are strictly relative; how then shall we explain the sum total of cognised things?

Kant, as we further saw, was not content to rest the insufficiency of metaphysic constructed by scientific notions on this general ground, but submitted to detailed examination the use of the three special notions of empirical knowledge in the determination of metaphysical principles. One of them, *substance*, has appeared entirely inadequate to determine the unconditioned in consciousness. Cause, as we shall presently see, is equally incompetent when applied to the idea of the unconditioned as the absolute totality of the conditions on which any phenomenon or event depends.

When in presence of a conditioned object, Reason has but one prescript or rule; it demands the absolute completeness of the series of conditions on which the phenomenon depends. Now, the only notions with which it can proceed to determine the unconditioned totality of a series are the categories of the Understanding, which are strictly finite in content—*i.e.* serve merely to determine relations between parts of experience. Through them knowledge of objects and consequently unity of empirical cognition is possible, but they cannot be employed to explain the whole of experience, which is manifestly not one among many *objects* to be known. Reason thus finds itself in a peculiar difficulty. The synthesis of conditions, or the conception by which we endeavour to give completed explanation of the conditioned, if really adequate to the unity demanded by Reason, must be too great for understanding, *i.e.*, must involve elements transcending and contradictory of the notions valid for empirical explanation; on the other hand, if the synthesis be adequate to the Understanding, *i.e.*, if the notions be employed with the limitations essential to them, it must be too small for Reason, must fall short of the unity required. This inner want of consistency in the categories of the conditioned manifests itself, in those cases where a series of conditioned and conditions is possible, as Antinomy or Antithetic. Over against the positive assertion of any synthesis an apparently well-grounded contradictory can be placed. Thus, *e.g.*, if we demand the absolute sum of conditions on which the temporal and spatial element of any phenomenon depends, we find apparently equal grounds for asserting that the world began and did not begin, that it is limited in extent and unlimited. So, if we demand the absolute series of conditions on which the content of intuition, as filling space and time depends, we shall find it equally possible to say that simple substances exist and that they do not exist; in other words, absolute continuity and absolute discreteness seem equally reasonable. *Quantity* and *Quality*, then, when employed to furnish conceptions explanatory of experience as a whole, result in sheer contradiction. So also, if we demand the absolute series of conditions on which the occurrence of an event depends, we find that universal causation according to natural law, and spontaneity or independence of natural law, are equally possible and appear equally well grounded. Finally, the existence of a phenomenon as such seems to demand for explanation both that all events are contingent, and that at least some thing in, or in connection with, the phenomenal world is necessary; in other words, we seem driven to admit that the phenomenal world has and has not a necessary ground.[4]

Now it is impossible, says Kant, to dismiss the problems suggested by such Antinomy with a vague reference to our ignorance.[5] The conditioned, of which explanation is desired, is given in empirical cognition, and we are not in search of an absolutely unconditioned, *i.e.*, of some ground which, *ex hypothesi, could* not be given in experience and of which we must perforce remain in ignorance, but of an absolute series of conditions as given in experience. Yet, from the evident contradiction which results from all efforts to comprehend such a series, it would seem impossible to attain our object. The ground of this impossibility, and with it the origin and significance of Antinomy in general, must be disclosed by Reason itself. For it is impossible that Reason should be in essence dialectical, or should propose to itself problems it cannot solve.[6]

The critical method of solution is one which throws much light on Kant's fundamental idea, and at the same time brings into prominence the least satisfactory aspect of his theory of knowledge. If the objects known were really things-in-themselves, *i.e.*, did they exist, so constituted as we know them, apart from and independent of the synthesis of possible experience, then seeing that they would be in themselves conditioned, the series of conditions must of necessity be given along with them. In such a case no escape from Antinomy would be possible; Reason would remain for ever in the state of self-opposition. But if the thing known be merely phenomenon, *i.e.*, exist as so constituted only in the synthesis of experience in which it is given, then it is no longer necessary that the series of conditions should also be given. For these are themselves only other syntheses of experience, and must be cognised by the same notions which afford knowledge of the conditioned under consideration. The prescript of Reason, in such a case, would be merely that we must unconditionally seek for the series of conditions, and it is quite possible that we may recognise the impossibility of ever bringing our search to an end. The appearance of Antinomy would thus signify that in the synthesis of experience, and through the categories which constitute that synthesis, the unity of Reason or completed explanation is not to be attained. Such—all details as to the differences between the several kinds of Antinomy and the special features of each solution being omitted—is the critical answer to the difficulties Reason encounters in the sphere of the cosmological ideas. In words, indeed, Kant makes his solution depend entirely on the distinction between phenomena and noumena; but, such distinction being rightly apprehended, it reduces itself to that above given —viz. the finite relative character of the categories of the conditioned, and their inadequacy as means of explaining the conditioned itself. The result is in so far negative, for Reason has no categories with which to think the world of experience save those just discussed, and contradiction in things themselves is avoided only by depriving Reason of any power to obtain an answer to its difficulties. Positively, however, there is an advance, for there now begins to arise the fundamental question of Kant's metaphysic, a question which, stated subjectively, would be that of the relation between Reason and Understanding; objectively, that of the relation between the intelligible and phenomenal worlds. On this we have to direct particular attention in the subsequent evolution of Kant's ideas, and it will assist much to enter somewhat more fully upon the discussion under one of the Antinomies—that which concerns the opposition between natural causation and freedom. The method of treatment is of importance both generally and for the particular view of the ethical element in the critical philosophy. Kant rightly calls attention to the fact that all psychological or practical teaching with regard to freedom must remain valueless, unless it be shown that freedom as such is not incompatible with the mechanical law already recognised as an *a priori* condition of experience. The distinction drawn by him between Intelligible and Empirical character has been much misunderstood, and requires careful statement.[7]

It is peculiar to the category of Cause as contrasted with Quantity or Quality, that in it the synthesis is of two perceptions, and consequently of two elements which may be heterogeneous, whereas in them the synthesis concerns parts of intuition, and consequently, elements which must be homogeneous.[8] Although, then, the law of causality permits us to say that for every given event there is a series of events from which it must follow, it does not permit us to say what these events are. It merely demands that the cause for every phenomenal event shall be found in phenomena, but does not prescribe the kind of causality belonging to such phenomena. Now it is at least possible to conceive, or does not contradict the fundamental law of experience to suppose, that in phenomena their causality may be determined otherwise than by phenomenal antecedents, although the effects of such antecedents, being phenomena, must be regarded as empirically or naturally determined. In particular, it must be pointed out that the synthesis of intuitions which we call object must have a transcendental ground, which determines it as empirical representation, and so we may conceive in the case of any phenomenon that, though the mode of its connection with others, the empirical character of its causality, is throughout determined by natural law, yet that the empirical character itself may be determined by a causality purely intelligible and following intelligible law; in short, may be determined by an intelligible character.[9] Thus the phenomenal world would appear as the manifestation in the forms of experience, and therefore under natural law, of the Noumenal world, which, being beyond time, is not determined by natural law, but may freely originate events, and is subject only to the law of pure understanding. Such a mode of causation is not, indeed, a possible object of experience, and consequently we can never hope to demonstrate its existence, but with equal certainty it must be held that we can never demonstrate its impossibility. If, then, from elsewhere, we have indications of something in human reason not limited to the forms of intuition, we cannot by dogmatic or scientific objections be debarred from investigating the nature and significance of such conceptions.[10]

The substance of this difficult discussion may be stated in a form differing from that given by Kant. The world of experience must be for intelligence a system of things causally connected. No object of scientific cognition can be regarded as free from the law of natural causation, for only through this law is nature possible. But the very fact that the conception of cause only enables us to think each separate event as part of a united system, points out the limit of that conception. We cannot subject the whole of experience to the law of natural causation, and are led inevitably towards the notion of something beyond the phenomena of sense. So far, indeed, as the separate events are considered, it is clear that, for cognition, it is only requisite that they should be regarded as forming parts in a systematic experience; but it is quite possible that the ground for their specific connections or positions in empirical cognition may depend upon something not itself phenomenal. If, then, we find that, connected with experience, there is something which, from its very nature, can never be merely an object of scientific cognition, and which yet seems to affect in the way of causation facts belonging to experience, we are not to regard such a causality as contradicting experience. Scientific cognition has its definite and determinate sphere; whatever is merely object of knowledge falls within that sphere. But such cognition is only for an intelligence not itself merely one of the objects of knowledge;

and consequently, alongside of the causal connection of experience we must place the connection of reason as at least possible.

Kant has connected his discussion solely or mainly with the Noumenal Ego, or intelligible character in man; but the argument is perfectly general, and, taken in connection with what is said under the IV. Antinomy (on contingency and necessity) brings into comparative clearness the position of the noumenal world in the Kantian system. Things, as objects of scientific cognition, are contingent, dependent—not grounds of their own existence.[11] As explanation of the being of each one, some other phenomenon is adduced. Within experience, then, which presents us with elements, connected, but each conditioned by the others, no object can be found which can serve as necessary ground for all others—no unconditioned. We are thus able to sever entirely the problems of reason and of scientific cognition. In the latter, explanation is to be sought entirely in the conditioned, and metaphysical completeness of explanation is impossible. In the former, completeness of explanation is sought; but as it cannot be obtained within experience and by the notions connecting experience, it must be found in the supersensible or noumenal world. The two spheres are entirely distinct. Within the realm of science no part can be played by any notion which refers to the supersensible, and it is of no concern to science what views are held with regard to that higher world. Within the realm of reason no use can be made of the categories of science, nor can we ever hope to comprehend the noumenal world in the fashion of scientific cognition.

What relation, then, does Kant definitely think as obtaining between the intelligible and empirical worlds? So far as can be judged from the discussion in the cosmological antinomies, he appears to land himself in the doctrine that the noumenal world is somehow mechanically related to the phenomenal—a doctrine which is, philosophically, the counterpart of the theological idea of God as distinct from the known universe, and arbitrarily creative of it. Yet, though Kant never succeeds in freeing his theory from this appearance of merely mechanical or contingent connection between the ultimate elements, it is to be noted that the mere possibility of an intelligible ground, distinct from the phenomenal, which is indicated by the cosmological antinomy, is supplemented both by the ethical ideas and by the crowning synthesis of teleology; and that, even in this preliminary outline of his metaphysical conception, he does not draw so sharp a line of separation between the noumenal and phenomenal as is frequently ascribed to him.[12] He seems inclined to regard the phenomenal as the form in which the noumenal world appears—a form having inner connectedness as a system of experience, but in a twofold manner contingent—*first*, as to its being at all; *second*, as to the empirical or material connections in it.[13]

The discussion of the antinomy involved in the dynamical notions of causality and necessary existence, points the way towards the final idea which Reason employs as explanatory of the conditioned world of experience.. The cosmological conception contained the series of conditions for a given phenomenon, and had unmistakably indicated that no completed series was attainable within the sphere of phenomena. Now, in the whole sphere of experience there is a certain unity, corresponding formally to the category of reciprocity, or disjunctive totality. Every real thing, every part of the system of cognised fact, is regarded as being real, or as having determined existence, in and through its relations to other real things The individual element is only to be completely determined by reference to all possible real predicates. Empirical cognition may never succeed in exhausting the determinability of the individual; but through the conception of this sum total of reality, our known universe has for us a unity, and empirical research a definite aim.[14] More particularly that which we call the *real* in any phenomenon, that which is empirically given, is determined in each case by reference to the sum total of reality. Now reason, endeavouring after the ground for the complete determinability of all objects whatsoever,—desirous, in short, of finding the complete unity to which they belong, —adopts this conception, empirically justifiable, of a disjunctive totality, converts it into the idea of an *Ens Realissimum* or collective sum of all possible predicates, regards this as the necessary ground of all existing things (none of which can be viewed as other than contingent), and finally personifies the idea as God. Though Kant does not point out the connection, it is well to note that the final goal of reason in this procedure is the ideal of an intuitive understanding, the ideal which, critically stated, is by Kant substituted for the idea here discussed.[15]

The examination of the validity of this idea, *i.e.* of the possibility of employing the notion of reciprocity as explanatory of the system of reality itself, takes the following form. If the unity thought under this idea be a true solution for the problem of reason, it must be that an object corresponding to the abstract idea of the *Ens Realissimum* exists. Reason, therefore, must establish a synthesis between this abstract thought and existence, and, in so doing, it may start either from existence or from the abstract thought itself. In the first case we have the cosmological and physico-theological proofs of the existence of God; in the second, the ontological.[16] Kant has little difficulty in showing that the cosmological argument and the argument from design not only suffer from defects peculiar to themselves, but involve for their final inference, or ultimately turn upon, the ontological argument.[17] With regard to the latter, it is as readily shown that a synthetic judgment affirming existence cannot rest on a conception only. Existence denotes the relation of an object to our conception, and therefore cannot be contained in the conception itself. *Being* is not a predicate which can be found in the subject of any judgment, and if we desire to add it synthetically, we must have some third term beyond the idea of the subject. Such third term, possible experience, is wanting in the case of the *Ens Realissimum*, which transcends experience.[18] Speculatively, then, Reason has no ground for asserting that an object corresponding to the transcendental ideal exists; while at the same time, as Kant cautiously points out, no speculative proof of its non-existence can be given. So far as this final problem of Reason is concerned, we have only the negative result which has throughout attended efforts to cognise the thing in itself; *noumenorum non datur scientia.*[19]

As was briefly noted, the critique of theology seems to follow a method somewhat different from that employed in the discussion of the Antinomies; the result, however, is the same in substance. The finite category of Reciprocity or disjunctive totality, valuable as a notion of Understanding, and giving unity to our conception of nature, is inapplicable to the unconditioned, and has no inner consistency when extended beyond the sphere of finite, relative cognition. The sum total of things known has not its ground in itself, and when we endeavour to connect this world-whole with the supersensible, cogitated as its ground by means of the category of reciprocity, Understanding finds no third term by which to effect the synthesis. The supreme ground of things, the *Ens Realissimum,* remains a mere Idea, for which objective existence cannot be proved. It is but the projection or shadow of the unity desired by Reason, and it is clear that if

Reason has for material only the mutually determining substances of the phenomenal world, and for method the purely relative notions of Understanding, no more concrete unity can be attained. The *Ens Realissimum* is in truth the notion of God as the substance of substances, the purely Spinozistic conception of God as the indeterminate ground of all possible determinations, and is nothing but the category of reciprocity raised to ultimate abstraction. The Kantian substitute for this we shall presently discover.[20]

What, then, is the sum of Kant's view with regard to Reason and its function? Not certainly the vague Agnosticism which has often been assumed as its full equivalent. The mere abrupt assertion that knowledge is limited to intuitions of sense, and that with such intuitions it must remain content—a theorem in itself of much simplicity—cannot be accepted as having any significance apart from the system of which it is an integral portion. That cognition is only of elements of sense experience, and that the categories of understanding have validity and application only within the limits of possible experience, are propositions which must be thoroughly grounded, not assumed on the strength of experience itself, or as the result of some unsuccessful attempts to represent the supersensible under forms other than those of sense. And the full grounds for these fundamental theorems cannot, so Kant thinks, be exhibited in any other manner than by reference to the special characteristic of Reason itself, the imperative demand for unity of conception. "The law of Reason, which requires us to seek for this unity, is a necessary law, as without it we should not possess the faculty of Reason, nor without Reason a consistent and self-accordant mode of employing the Understanding, nor, in the absence of this, any proper and sufficient criterion of empirical truth."[21] In other words, the unity of Understanding, which alone renders experience possible, is subordinate to, or dependent on, the unity of Reason. The limit, and consequently the validity, of cognition can only be disclosed and accurately determined by reference to that which passes beyond the limit. The systematic connection which Reason demands, and which involves the idea of a completed whole of cognition, prescribes limits to the unity of Understanding, and points to the higher unity of which that is but a part. The finite modes of this subordinate unity are indeed inadequate to the requirements of the higher synthesis, and therefore we cannot determine the soul as substance, or complete the causal series of the phenomenal world, or determine God as the supreme ground or Intelligence whose manifestations are the phenomenal. The modes in which the rational demand for Unity expresses itself cannot, then, be regarded as *constitutive*, *i.e.*, they are not immanent in the objects known, but must be viewed as merely *regulative*, *i.e.*, as pointing out or specifying the final goal of speculation, and thus furnishing an ideal or norm for research. As regards the whole system of cognition, such principles must be held to have objective worth, for though they do not determine objects as such, they require systematic unity in the operations of the understanding, or demand absolutely that understanding shall proceed in accordance with the requirements of such systematic unity.[22]

Now in the idea of a systematic whole of cognition are involved not only the general laws which express the conditions of experience as such and are *a priori*, but specifications of them, or empirical laws which cannot be known *a priori*. To say, then, that our cognition must proceed according to the idea of systematic unity is equivalent to saying that Nature, not in its formal aspect as the complex of general laws of all possible experience, but in its material aspect as the complex of empirical rules of actual fact, must be accommodated or adapted to the faculty of cognition—that Nature, in short, must be viewed as throughout intelligible.[23] Undoubtedly this principle cannot be scientifically proved. Although we can say that no experience is possible save under those general forms which express the very substance of Understanding, yet real empirical experience *might be* utterly chaotic; it might be quite impossible to discover real classes, empirical or special laws of fact.[24] The empirical, as such, is thoroughly contingent; nay, even the certainty of general law may be viewed as contingent, for our categories only yield synthetic principles in relation to something quite contingent, viz. possible experience.[25] The principle, then, under which we subsume real experience is not constitutive but regulative, a mere maxim of reason, and subjective. The adaptability of Nature to our faculty of cognition is, therefore, not a principle which determines objects; and judgment, which mediates between universal and particular, is not here, as in the case of the synthetic propositions of understanding, determining, but merely reflective. The empirical particular is given, but the universal is not necessarily given in and with it; we supply the universal.[26]

The notion of reflective judgment Kant, as we shall presently see, works out at length in the

Critique of Judgment; meanwhile, there must be indicated, as of extreme importance for understanding the Kantian theory of knowledge, certain detailed explanations of the general principle of Intelligibility put forward in the *Critique of Pure Reason.*[27] All ultimate explanation, we already found, is in essence of a threefold form; the type is invariably that which has presented itself in the analysis of Perception. The manifold or particular is united into one consciousness through the general or universal. Here we are dealing specially with the unity of empirical laws, a unity which is not indeed involved *in* the very notion of experience and understanding, but without which understanding and experience, as known to us, would not exist.[28] The conditions of this unity are three in number. First, that there should be a certain identity in nature, a certain possibility of regarding various phenomena as species of higher genera. This, when raised to its highest form, or made ultimate, is the Principle of Homogeneity, the expression of the rational search for unity amid diversity, and the basis of the old logical rule *Entia non sunt multiplicanda præter necessitatem.* Second, that there should be difference or particularity in nature, a possibility of surveying completely and distinguishing the species that come under genera. This, in its abstraction, is the Principle of Diversity or Variety, expressing the necessity for manifold or difference in cognition, and is the basis of the rule *Entium varietates non temere sunt minuendæ.* Third, that there should be connectedness or relatedness among the phenomena of nature, a possibility of regarding all, whether genera or species, as forming parts in one systematic whole, and therefore of passing without discontinuity from one empirical conception to another. This, in abstraction, is the Principle of Affinity or Continuity, the union of the first two principles, the expression of the ultimate relatedness of things, and the foundation of the rule *Datur continuum formarum.*[29]

These principles are the formal or abstract expression for what Reason can retain of the three Ideas. The Ideas, when first discussed, appeared to carry with them reference to objects, in this respect resembling the categories. But no object within experience can be found adequate to them, and the apparent demand that there shall be an object is in truth delusive. So far as theoretical cognition is concerned, then, the Ideas simply express the rational requirement of systematic unity, and are therefore not notions of objects, but problems towards the solution of which we approximate. It is true they have another aspect, *i.e.*, their value for cognition is not their only value, but theoretically they are to be regarded as regulative merely. Through this view of their nature we obtain the true substitutes for Rational Psychology, Cosmology, and Theology. We cannot determine the soul by the category of substance, but we proceed, and must proceed, in our search for systematic unity, as if psychical phenomena could all be determined as modifications of one simple permanent essence (*Principle of Homogeneity*). With regard to Nature in its corporeal or mechanical aspect, we proceed as if the series of conditions on which any event depends were really infinite (*Principle of Diversity*). With regard to God, we proceed as if all the objects in the universe had connection, in so far as they are due to or ordered by a supreme, all-comprehending intelligence (*Principle of Continuity*).[30]

Now it is remarkable that in this last principle Kant has again approached the idea of an Intuitive Understanding; indeed, it is plain that in order to understand much of his later, more matured metaphysic, we must bear in mind that the transcendental Idea of God, the principle of Intelligibility, the teleological view of nature, and the Intuitive Understanding, are in essence identical. As Kant in this connection remarks, "The highest formal unity, which rests solely on notions of Reason, is the teleological unity of things, and the speculative interest of Reason renders it necessary to view all order in the world as if it originated from the purpose of a supreme Reason. Such a principle opens up a quite new prospect for our Reason in its application to the field of experience, that, *viz.* of connecting the things of the world according to teleological laws, and so attaining their highest systematic unity."[31] The notion of End, as the supreme metaphysical category, makes its appearance here somewhat abruptly, and it will be necessary to point out how it comes forward in this place before considering how the faint outline of a final conception sketched in the extract just given receives filling in from Kant. The principle we have just been discussing at some length, that of the Intelligibility of Nature, is merely the assertion that Nature is adapted to our faculty of cognition, *i.e.*, is to be treated *as if* it resulted from an intelligence similar to ours. But to view Nature as the product of an Intelligence is to view it as the end realised by that Intelligence; the principle of Intelligibility is therefore the principle of teleological judgment.[32] In itself, Kant is careful to say, this principle is merely regulative, but it contains of necessity reference to a hypothetical supreme understanding, and, when fully determined, leads to the final conception of the universe as an organic whole, in which the parts and their connection are dependent on the idea of the whole.[33] How such a unity as is thus contemplated should be even possible, we have no means of cognising. It is a transcendental ideal, a mere prescript of Reason. The Ideal, however, is not left quite so indeterminate by Kant, and in following the development of his views on this, the outcome of his *Critique*, we may take as a clue the kind of conception which, with his doctrine of theoretical cognition, must be formed of the Intuitive Understanding. The elements in the ultimate synthesis are clearly the pure Ego, the world of experience or phenomena, and the supersensible substratum of the phenomenal world. To *cognise* the relations of these three we must employ the categories of understanding, and, as the question is of a certain systematic unity, the category appropriate is evidently the category of Reciprocity. The phenomenal world shall, somehow, appear as the result of the mutual relations of noumenal ego and noumenal non-ego. Although such a conception is not theoretically demonstrable, yet we shall find that what Kant substitutes for it retains traces of the category, Reciprocity, beyond which he never proceeded.[34] The category cannot be used otherwise than analogically, still it is employed, even though at times Kant would appear to have regarded the system as organically rather than mechanically united.

This may be put in another fashion. The systematic unity demanded by Reason leads to the conception of the universe as determined by a supreme intelligence. Now the only mode of determination of objects with which we are theoretically acquainted is the mechanical or necessary. As the supposed intelligence is removed from the conditions of experience, its activity must be free, and the effects produced must be viewed as spontaneously originating. (Thus, it may be remarked in passing, the oppositions of Freedom and Necessity, Mechanism and Teleology, are for Kant identical.)[35] If, then, our conception of an intuitive understanding is to be further specified, it must be by means of any indications we have of a causality not subject to mechanism but free or self-determining. From the notion to be formed of such Freedom we shall arrive at the full significance of the teleological judgment, or judgment founded on the relation between the noumenal and phenomenal.[36]

It has already appeared that Reason, speculatively, can at all events advance no dogmatic disproof of free causality. If, then, there be given in consciousness any fact inexplicable save through the supposition of Freedom, we are not debarred from accepting Freedom as a fact, even though its possibility be theoretically incognisable. Now a fact which necessitates the assumption of Freedom as its *sine qua non* must be of such a nature that its content is not limited by the conditions of intuition, Space and Time. There is only one fact, the notion of which is given as so unlimited, namely, the moral law. The conception of Duty, as that which should be, evidently refers to no fact given as existing. In itself this conception is purely formal, and it is characteristic of all actions truly moral that they contain reference to the form of law only, that they are performed from respect for Duty. As pure form alone is it possible that the notion of Duty should express a rule of action for a rational being as such, for a being in whom Reason is practical or can prescribe ends for action.

If the particular volitions by which we realise our ends always conformed to the pure law of duty, or were always prompted by maxims or motives which we could at the same time desire to see universally followed, then the subjective will of the individual would coincide with pure Practical Reason or objective will. But in man subjective considerations intervene; he is not merely pure intelligence, which can think a universal law of action, and can recognise that a law of duty, whether possible or not, would be realised as universal law, but a natural phenomenon, swayed by empirical motives or impulses. Thus the conformity of subjective volition to objective reason appears as *in fact* contingent, as something which ought to be, but is not. The relation of subjective to objective will, so regarded, is obligation. It is evident, further, that as the moral law is pure form, it can be prescribed by nothing but Reason itself, for any admixture of foreign empirical elements would destroy the absolute purity of the conception, Duty. Finally, it may be pointed out that the kind of obligation contained in the law of Duty is unconditional; the imperatives of Duty are categorical, given and capable of being given only to Reason and by Reason. Thus, by mere process of analysis, it becomes apparent that Duty or Moral Law, Autonomy of Practical Reason, and the categorical Imperative, are various modes of expressing one and the same fact.[37]

So far we have but pure analysis of the given fact, Duty. But the moral law as a categorical imperative demands to be realised, and, as we have seen, such realisation in the phenomenal world is to be regarded as contingent. How, then, is it possible that there should be this connection between Reason as practical and the phenomenal world? How should pure regard for Duty be for intelligence a command which must be realised in the phenomenal world? In other words, How has the moral law the force of obligation?

It is quite true that we must ascribe to every rational being Freedom in a practical sense, as independence of material or empirical conditions, for no rational being can think his actions as due to external force, and consequently must act *under the idea of freedom*, or be for practical purposes free.[38] Such freedom, however, is in its notion merely negative—goes no farther than the *Critique of Pure Reason* carried us; but it points the way towards the positive notion we are in search of. For freedom is a kind of causality, and therefore, though not dependent on physical antecedents, is not to be conceived as lawless. The one law of a free will is autonomy; in every action the will is a law to itself; a free will and a will subject to moral law are thus one and the same. Freedom is consequently the necessary correlate of the consciousness of moral law.

The problem, however, is not yet solved. We have not yet seen how it is possible for such autonomy of will, such freedom, to carry with it obligation. In the noumenal world, in the world of pure reason (*Verstandeswelt*, as Kant calls it), man must regard himself as free, not merely in a negative sense, as being above empirical conditions, but positively, as being subject only to the law of his own reason. In the phenomenal world, on the other hand, he must regard the effects of his volition as throughout determined by natural causation. If he were only a member of the intelligible world, then all his actions would conform to pure autonomy of will or moral law; if only a member of the phenomenal world (world of sense), then all his actions would conform wholly to the natural law of the desires and inclinations, *i.e.*, of happiness. But the world of understanding to which he belongs is the very foundation of the phenomenal world and its laws; consequently the law of this intelligible world must be regarded as binding upon him. Only when I regard myself as belonging, on the one side, to the world of understanding, and on the other, to the world of sense, does the principle of practical reason become for me a categorical imperative, and the realisation of its precepts an obligation.[39]

Freedom, then, the one speculative idea the certainty of which is directly given, is for Kant the very essence of Reason.[40] Only as determining itself has Reason any positive content. Though theoretically undemonstrable—for under the forms of understanding we cannot even comprehend its possibility—Freedom is in a practical regard the one absolutely sure notion of Reason. With his usual caution Kant does not directly identify Freedom with the consciousness of an unconditional moral law, but throws out the identification as a hint. "Freedom and an unconditioned practical law therefore point mutually to one another. I do not here ask whether they are in fact distinct, and whether an unconditioned law is not rather the mere self-consciousness of a pure practical Reason, which is one with the positive notion of Freedom; but I only ask whence the knowledge of an unconditioned practical law rises, whether from Freedom or from the practical law."[41] This secondary question he answers in favour of the moral law. So far as consciousness of Freedom is concerned, there is immediately given only the mere negative notion which had been treated in the *Critique of Pure Reason;* the positive notion, consciousness of self as active or practical in an intelligible or rational system, is gained through and in the consciousness of the moral law.[42]

The two notions which thus form the foundation of Kant's ethics are Freedom and autonomy of will, or the idea of pure will as universally legislative. Only in the practical sphere, *i.e.* only in the relation of reason to will do we come immediately into connection with the noumenal, for only here are we presented with objects which cannot be regarded as merely objects in experience. No other notion than that of causality supplies us directly with a means of connecting the phenomenal and intelligible systems.[43]

It is not my purpose to enter on any of the details of the Kantian ethics, for they are not essential elements in his final metaphysical conception, but attention may be directed here to the peculiar formalism which characterises the system, and which is the counterpart of the formalism inherent in the theory of knowledge. Pure practical Reason, as universally legislative, and the possible maxims of individual volition, seem so absolutely heterogeneous that no conjunction can be effected. That one of the elements in what we call ethical action is the *formal* or purely moral seems undoubted, but equally certain is it that the *formal* aspect remains for Kant the entire content of what is ethical. In details the perplexity thence arising manifests itself, first, in the extreme difficulty of finding a means of transition from the simply universal principle to the system of concrete ethical relations; second, in the necessity for postulating an endless ethical progress; and finally, in the extreme rigorism or purism which would have as present motive in all ethical action the constraining force of reverence for supreme moral law.[44]

Just as in theoretical cognition the medium of reconciling so far as possible the pure generality of the conditions of experience with the contingency in the special laws of nature was sought in the notion of end, or in the adaptation of nature to our faculty of cognition, so here, in the practical sphere, the same notion comes forward with even greater value attached to it. For in the practical sphere the notion of end has complete validity, whereas for theoretical cognition it can be employed only by analogy. Practical Reason has an object, not empirically given, but following from its very nature and prescribed by itself. The realisation of its own law, both in the special sphere of the individual, where opposition is experienced from the particular empirical maxims of will, and also in general, or in its unconditional totality, is the pure object of practical Reason, the end at which it is aimed. Otherwise expressed, this end is for Kant the *summum bonum* or highest good, the complete and unconditioned totality of the object of pure practical reason, the perfect harmony of universal and particular will.[45]

The notion of the *summum bonum* contains in itself two elements, virtue or state of worthiness to be happy (which is the supreme good, *bonum supremum*), and happiness, which must be added to virtue if the good is to be perfect or highest. Now these two factors are not identical, nor is their combination in one notion given analytically. From the one the other does not analytically follow. Since, then, it is *a priori* necessary that the *summum bonum* should be realised, the possibility of synthesis between these two factors must somehow be cognisable *a priori*. The one, consequently, must be the *ground* of the other, and there must be some common third term, some basis, which shall enable us to cognise *a priori* the necessity of such relation between them. When, however, we try so to think the connection between the two elements, we find that finite categories are being applied to infinite objects, and that antinomy naturally results. It is impossible that the desire for happiness can be the origin of the maxims of virtue, for this desire is not in itself moral. It is impossible to regard virtue as the *cause* of happiness, for happiness depends upon temporal conditions not included under the determination of will itself. The moral law, then, which is an integral portion of the final end contemplated, would seem to be merely fantastic, the work of imagination. The present antinomy, however, like those of pure speculative Reason, yields at once to *critical* consideration. The first impossibility holds good absolutely, the second only under a particular condition. If we regard virtue, *i.e.*, practical reason, freewill, as causative in the world of sense, and at the same time regard the said world as the only field for realisation of moral maxims, then, beyond all doubt, it cannot be asserted that happiness must necessarily be associated with virtue. For nature, as *mere* object of *a priori* cognition, as *mere* possible experience, is not necessarily adapted to the requirements of reason, even in its practical employment. But we have seen that there must be contemplated existence other than that of the sensible world; it is, therefore, possible that in this supersensible system the third term may be found by which virtue and happiness are connected. The exacter specification of this third term is the most notable portion of Kant's practical *Kritik*, and through it we may effect the transition to the final aspect of his theory.

The realisation of the *summum bonum* is the absolutely necessary object of a will determinable by moral law, and therefore, since that law is given as a fact, the conditions of such realisation must be possible. Now, the *summum bonum* contained two factors:—1. Accordance of disposition with the moral law, *i.e.* perfect holiness; 2. Happiness proportionate to virtue, and dependent on it. As regards the first, it is evident that the harmony between empirical and rational can be attained only through an infinite progress, an infinite series of stages in the development of ethical strength and purity. Such infinite progress, which is truly the object of our will when morally determined, is possible only on the supposition of the soul's immortality. As regards the second, the more interesting on general grounds, it is evident that Happiness in proportion to morality cannot be thought as dependent on the will of any being so far as only part of the sense-world. The condition, then, which renders possible the ultimate harmony of the world of experience with the demand of practical reason, must be looked for in the supersensible ground of that world. This ground, since it contains the principle of connection between virtue and happiness, must be regarded as possessed of both intelligence and will, that is to say, is God. The existence of God, then, is the condition necessary for the harmony of moral or practical reason.[46]

Thus in the domain of practical reason we obtain the only solutions possible to us of the difficulties into which we were thrown by applying the finite categories of Substance, Cause, and Reciprocity or Disjunctive Totality, to the Ego, the World, and the unity of both. For (i.) instead of the permanence of a soul-substance, of which we could have no intuition, and hence no grounded cognition, we have now the practical and rational certainty of permanence in the ethical progress of the moral agent; (ii.) instead of the merely negative conception of a noumenal causality, and of its possible exercise in the world of sense, we have now the practical certainty of moral or rational freedom; (iii.) instead of the mere ideal of a being on whom depends the existence of all contingent things, we have now the practical certainty of a supreme moral ruler. Thus immortality of the soul, positive freedom of will, and Reason as the ultimate ground, are speculative Ideas practically warranted, though theoretically neither demonstrable nor comprehensible.[47]

Such Ideas, though objects only of practical belief, and not of knowledge, are by no means to be regarded as taken up arbitrarily. They are necessary assumptions in the domain of Reason itself, and could be rejected on no other ground than that they contradict the results of the speculative employment of the same faculty, a ground already shown to be untenable.[48] Nor is it to be imagined, either that Practical Reason is called in to fill up the gaps left by the critique of the speculative ideas, or that in regard to these ideas there is any radical difference between pure practical and pure speculative Reason. In both *Kritiken* it is Reason simply that is under investigation, and the difference concerns only special faculties to which it stands in relation. For, with reference to the faculty of cognition, Reason must appear to demand that objects corresponding to its conceptions shall be exhibited, and such exhibition is impossible. But with reference to mere self-determination, Reason only demands that objects corresponding to its conceptions shall be known to exist, even though no further determinations of the nature and mode of their existence can be attained. Even to call them "objects" is to some extent inaccurate, for God, the Immortality of the soul, and Freedom of will, are not "objects," nor can they be cognised as such.[49]

Thus Reason, as self-determining, supplies us with notions of Freedom, Reason as determined with notions of Nature, the categories of Understanding. Union between these two has been found in the notion of End, in the idea of Nature as adapted to Reason in its practical aspect. The notion of End is, therefore, the final element in the Kantian metaphysic, and although Kant had occasionally handled it in the *Critiques* of Pure and Practical Reason, it lay in the nature of things that he should devote special consideration to it.

We have already called attention to this notion as the mediating element through which the various oppositions in the Kantian system were so far reconciled. For these oppositions, of Understanding and Reason, Phenomena and Noumena, Necessity and Freedom, Mechanism and Teleology, are at bottom the same, and they find the same solution. In the *Critique of Pure Reason*, the principle of the adaptation of Nature to our faculty of cognition appeared as the means of reconciling Understanding and Reason. In the *Critique of Practical Reason* the adaptation of Nature to the requirements of practical reason appeared as the means of reconciling Freedom and Necessity. In both, then, constant reference had been made to the supersensible basis of things; and in the *Critique of Judgment*, undoubtedly the hardest of Kant's writings, this reference is made explicit and final.[50]

The ultimate opposition with which we are presented in the *Critiques of Pure and Practical Reason*, is that between the categories of Understanding and the notions of Freedom, between the world of sense and the world of intelligence. But though there is an impassable gulf between these two, rendering impossible any transition from one to the other by the theoretic use of Understanding, as if they were distinct worlds exercising no mutual influence, yet it has also appeared that the supersensible, the world of freedom, *is* to exercise influence on the sensible, the world of nature. For the notion of freedom is to realise in the world of sense the end posited by its own laws, and it must therefore be possible so to think Nature that its conformity to law should permit at least the possibility of Ends according to Freedom being realised in it. There must, therefore, be some means of uniting in thought the supersensible which is the ground of Nature, and the supersensible which is practically contained in the notion of Freedom. Some common notion must be found, which, though not theoretically or practically cognisable, yet renders possible the transition from the one realm to the other.[51] Understanding and Reason, the categories of finite thought and the Ideas, the world of natural necessity and the intelligible system of freedom, must be thought as united, as harmonising with one another, through the particular constitution (determination) of the supersensible, which is their common basis. We have already seen that Judgment is the faculty which mediates between the particular and universal; accordingly here, where particular and universal are carried to their ultimate abstraction, Judgment, *par excellence*, is the mediating faculty, and its principle, that of the adaptation of nature to our faculty of cognition, is in the first instance the third term we are in quest of. "Understanding, through the possibility of its *a priori* laws for Nature, proves that this can be known to us only as phenomenon, and therefore, at the same time, points to a supersensible substrate for it, but leaves this wholly *undetermined*. Judgment, through its *a priori* principle for the consideration of Nature in reference to its possible particular laws, gives to the supersensible substrate (in us as well as without us) *determinability through intellectual function.* Reason, finally, through its practical *a priori* law, gives *determination.* Thus Judgment renders possible the transition from the domain of Nature to that of Freedom."[52] Judgment is, in this case, only reflective, *i.e.* while the particular is given in experience, the universal is supplied by us, and evidently the principle of such judgment is that of End, Design, or Adaptation. The particular of Nature, which is not determined by the universal of the categories, is judged as being fashioned or ordered by an Understanding, since in no other way is it possible for us to think that particular laws should harmonise so as to form a consistent, orderly, intelligible experience.[53] Of this adaptation or design Kant signalises two species—*first,* subjective, where the empirical condition for the exercise of the faculty of judgment is furnished by the feeling of pleasure or pain; *second,* objective or logical, where the possibility of the given natural form is thought as necessarily depending on the notion realised in it. The first is the matter for æsthetic judgment, the second for teleological judgment. The latter only is here considered, and even that, but to such extent as is requisite to disentangle the main idea inherent in Kant's exposition of it.[54] The following, then, are the main points in the doctrine of teleology. External adaptation, where one thing is supposed to exist solely as a means towards another, is to be carefully distinguished from inner adaptation, in which the parts of a whole are so related as to be mutually cause and effect, means and end, and in which the parts are only for and through the whole. Any judgment of external adaptation (such, *e.g.*, as the adaptability of sand on the sea-shore for the growth of pines, etc.) is relative, and always lies open to the further question as to the necessity for the existence of that which in the given instance is regarded as end.[55] Only the organised products of Nature exhibit inner conformity to purpose, or display a mode of causality not, so far as we can judge, explicable through mechanical law.[56] For an organised product has a mode of growth entirely distinct from the mechanical addition of like parts; its members are mutually dependent; and its product is something similar to itself. As distinguished from an artistic product, where the result also embodies the idea of the whole and the parts also exist only for the whole,—where, therefore, the parts are united from without,—an organised product must form a unity through the mutual letermination of the parts, and the parts must be mutually cause and effect of their specific form.[57] It is not indeed possible to prove that such bodies as organisms cannot be produced by the operation of mechanical laws, but there can be no doubt, Kant thinks, that we are unable to perceive how they could be so produced.[58] At the same time, causality according to ends, the mode of causation here described, is not an object of experience, it is not a category of understanding; it is not even a notion of Freedom. We must rigidly confine its application to the faculty of Judgment, and hence we can see that the apparent dialectic between the principles of mechanism and teleology is removed so soon as we critically state the limitations of both. For these principles do not assert absolutely. Mechanism is true for objects as matter of experience in general, *i.e.* as phenomena; teleology is only the mode in which we think unity in particular experience for behoof of the faculty of judgment. We neither assert that things must be generated mechanically, nor that there must be a production according to end or final cause. In the supersensible these opposites may be the same. To our intelligence they differ, and have different spheres, but a higher understanding might see the ultimate identity of the two.[59]

Up to this point Kant has been merely engaged in emphasising an empirical fact, the extreme diversity between mechanism and that peculiar collocation of forces, themselves mechanical, which is presented to us in organised bodies. For it is to be observed that in his view, the notion of an end in Nature (*Natur-zweck*), that is to say, of a causality in nature distinct from the mechanical, is neither a category of understanding nor an idea of freedom. So far, then, what he says on Teleology is not an integral part of his general philosophical conception, and has for us only an indirect interest. But although this notion of end in Nature is empirically conditioned, and the object in connection with which it arises is given only in experience, so that we could not, *a priori*, pronounce such an object possible, yet there must be some general principle through which the particular mode of thinking denoted by the notion becomes at least possible. This general principle is the rule for the faculty of Judgment, which has been already stated, the principle of the intelligibility of Nature.[60] Now this principle, as we already saw, is definitely and necessarily connected with the important doctrine of empirical contingency, and Kant, in considering the teleological judgment, is naturally led to express, in the most precise form, the origin and significance of this doctrine.[61] The notion of the contingency of the particular arises, according to him, from the fact that in our cognition Understanding and Sense are distinct, that with us the special forms of the particular of sense are not determined by the general rules of understanding, while these general rules themselves receive concreteness only through sense, and therefore in modes, so far as they are concerned, contingent. Our understanding is discursive and must proceed always from general to particular; but if the particular be contingent, then the general form under which its varied collocations are thought by us to be necessary or intelligible, is not a principle for understanding, but only for judgment. In other words, the particular so far as Judgment (*i.e.* Reflective Judgment) is concerned, consists in the varied collocations and forms of the general laws of nature, and the principle by which we think to ourselves unity or intelligibility in this particular is not one which in itself determines the particular; it is merely supplied by Reason on account of the peculiarity or limited nature of our Understanding. The analysis, however, is not yet complete. The principle of reflective judgment, according to which the parts of experience are thought to be so determined as to form a unity for understanding, is the general principle of teleological connection. For our understanding cannot, from its discursive nature, think the whole as determining the parts otherwise than through the mediating notion of End; *i.e.* where the parts seem to exist only through and for the whole, the reason is for our understanding to be found in the notion of a causality according to end. The notion of adaptation in general is, therefore, dependent on the peculiarity of our understanding, and marks its limit. But, as we have repeatedly seen, the determination of one thing as peculiar in quality, the definition of a limit, is only possible through reference to something not so qualified,—to that which passes beyond the limit. If, then, we determine our understanding as limited so far as the particular of nature is concerned, the notion by which in reflective judgment we overcome this limit, is implicitly the notion of another understanding which is not similarly limited, and for which contingency of the particular would not exist. In such an understanding the particular would be determined in and by the universal. The whole of experience would be for it an organic whole; the universal would be no longer, as in our understanding, *analytic*, receiving concreteness from an accidental particular; but *synthetic*, or a representation of the whole in and through which the parts are definitely given. Of such an understanding we can form no adequate conception, but the notion of it lies at the root of the reflective judgment, and is the necessary correlate of our understanding.

[The special application of this notion to our judgment upon the nature and generation of organisms follows directly. An organised body is one in which the parts, as regards form and combination, depend upon the whole. But for our understanding, mechanical generation of a whole through combination of the parts is the only intelligible mode. We have therefore, in the contingency of the parts of an organism as regards the whole, the particular elements which compel us to conceive it as possible only through a causality according to ends—*i.e.* as the realisation of the idea of the whole. It is certainly not implied that such causality is actually the mode in which organisms are generated; for we cannot assert that the supersensible basis of that mechanism which we discover in nature may not contain in itself the ground for organic products. We only say that, owing to the peculiarity of our understanding, its limit as regards the particular, we must judge of organisms in conformity to the notion of end. For scientific explanation, then, teleology affords no aid, and must not be called in, save as an auxiliary principle in directing research. The mechanical and the teleological modes of thinking nature may quite well co-exist. Both are necessary, from the peculiar nature of our understanding, and both, though the second more directly, refer to the supersensible substrate which we may conceive as the necessary correlate of the intuitive understanding.[62]]

Thus the contingency of the particular in experience, and especially the contingency of organised natural forms, when compared with the general laws of mechanical causation, points the way towards the final reconciliation of understanding and reason, of necessity and freedom, and enables us to see why in science no other than mechanical explanations can ever be resorted to; while, at the same time, it is recognised that the mechanical is inadequate to final solution, both of nature itself and of the special forms we call organisms.[63]

The teleological principle, however, is theoretically only for reflective judgment, and therefore enables us to conclude with no certainty as regards end itself. But not only does the notion of end, in natural forms as inner adaptation, lead us to regard nature as a system regulated according to the same idea—*i.e.* lead us again to introduce the conception of external adaptation, and so to contemplate the possibility of a final end in nature; but the end presented to us by practical reason is itself a final end, and by its means we are enabled to grasp, with subjective or practical certainty, the notion of a complete teleology in nature. As natural phenomenon, man cannot regard himself as final end; nay, in Nature merely as such, whether external or internal, nothing leading to such an idea is to be discovered. But as practical reason, as a moral being, man can regard himself as the final end, not merely of nature as it is, but of the created system. For practical reason places before him an end of absolute worth, the realisation of the highest good, the moral development of a nature under moral laws. Through this we obtain a principle by which we may, with at least subjective certainty, determine the nature of that supreme understanding to which the hypothetical employment of reason had led us.[64] Through the practical, the merely problematic result of speculation receives for us concreteness or definiteness. For we are, from practical grounds, compelled, with at least practical necessity, to ascribe a certain end or aim to this supreme understanding. The moral law in us, or practical reason, prescribes the realisation of the highest good; but the elements of the highest good, as we have already seen, require to be united by some being beyond nature. We, as beings subject to moral law, must therefore think the supreme cause as a moral cause—*i.e.* as so determining the course of things that scope shall be permitted for the realisation of the final end of reason. The ultimate conception, then, of the Kantian metaphysic, is that of ethical teleology. "The systematic unity of ends in this world of intelligences, which, although as mere Nature it is to be called only the world of sense, can yet as a system of Freedom be called an intelligible, *i. e.* moral world (*regnum gratiæ*), leads inevitably to the teleological unity of all things which constitute this great whole according to universal natural laws—just as the unity of the former is according to universal and necessary moral laws—and unites the practical with the speculative reason. The world must be represented as having originated from an Idea, if it is to harmonise with that use of reason without which we should hold ourselves unworthy of reason—viz. the moral use, which rests entirely on the idea of the supreme good. Hence all natural research tends towards the form of a system of ends, and in its highest development would be a physico-theology. But this, since it arises from the moral order as a unity grounded in the very essence of freedom and not accidentally instituted by external commands, establishes the teleology of nature on grounds which, *a priori*, must be inseparably connected with the inner possibility of things. The teleology of nature is thus made to rest on a transcendental theology, which takes the ideal of supreme ontological perfection as a principle of systematic unity, a principle which connects all things according to universal and necessary natural laws, since they all have their origin in the absolute necessity of a single primal being."[65]

LECTURE IV.

RECENT DEVELOPMENTS OF KANTIANISM.

In last lecture I completed the survey of Kant's theory of knowledge and of the metaphysic dependent on it. In the course of the exposition those points only were brought into prominence which seemed to have special interest as bearing on the present position of philosophical questions. Before proceeding to note somewhat more particularly one or two of those problems, solution of which, as it appears to me, can be looked for in no other way than by carrying forward the critical method, I may briefly recapitulate the main results of that method so far as they have become apparent in the course of our survey. In so doing, it will be advantageous to reverse the order of statement, and to proceed from that view of Reason and its problem which was in truth the regulating idea in the Kantian philosophy.

The highest conception of speculative thought is the unity of Reason, the complete comprehension of the manifold details of experience as elements in the supreme synthesis of self-consciousness. No finite nature can hope adequately to attain such unity, but the outlines of it are shadowed in finite knowledge or scientific cognition, and it is realised with at least subjective distinctness through the ethical ideas which alone have an import over and above the finitude of merely relative cognition. Reason, to use Kant's expression, is in its very nature *architectonic, i.e.* it endeavours to comprehend the organic plan of experience, the ultimate synthesis of existence and thought. It therefore works throughout under the idea of a systematic whole of thought, and its problem is the justification of this idea. Knowledge (scientific cognition properly so called), strictly limited to the content of sense-intuition, *i.e.* to finite, relative objects, is throughout penetrated by Reason, and manifests its incomplete and partial character when compared with the ideal which Reason sets before it. Under the forms of knowledge we cannot grasp the Unconditioned, *i.e.* no justification of the metaphysical idea is to be obtained through the notions of empirical cognition; and the recognised inadequacy of these forms to the solution of the highest problem enables us to define their legitimate province and to fix their significance for thought. The context of experience which is given in and through the relative notions of understanding, is on a lower scale the type of the supreme unity of Reason, and its threefold synthesis of Ego, general thoughts or categories and particulars of sense corresponds after its kind with the supreme synthesis contemplated in the intuitive understanding, or God, the centre of the teleological system of things. We through the ethical idea (Freedom) know ourselves as members of this system, and recognise in the world of cognition but the mode or manifestation in finite intelligence of the world of Reason. Not that we are to think of the universe as being in itself double, to form a *quasi*-Platonic conception of a world of ideas corresponding to the world of sense. The phenomenal world is for Kant only the manner in which finite intelligence can be in connection with the infinite intelligible system. It is true he never succeeds in freeing his theory from a certain dualism inherent in it from the outset, and appearing as the irreducible element in the successive syntheses through which he strives to give expression to his final conception of the unity of Reason. The worlds of intelligence and sense seem still to be connected mechanically, and the result to be what Fichte called a "collective whole." This dualism, as might easily be shown, is nothing but the last residuum of the individualist mode of viewing mind, which Kant was the first to subject to critical examination, but which still retained its influence over him. To it we must ascribe the appearance of subjective idealism which clings to the critical theory of perception, and which is peculiarly prominent in the analysis of sensibility. To it, also, we must trace the method of solving the various antinomies which appeared when scientific notions were employed metaphysically, for only on such a view could reference of the antinomy to the subject be regarded as a satisfactory solution.

The theory of cognition, on which this ultimate conception rests, and from which it is developed, may be regarded either as an analysis of experience or as the exposition of the idea of self-consciousness. It is, therefore, independent of either empirical (descriptive) psychology or empirical (natural) science. For in both of these the facts from which inferences may be drawn are parts of experience, cognised facts, elements known and known by self. In themselves, consequently, they can throw no light upon the conditions under which any experience of a fact is possible for the conscious self, under which any fact can be cognised. To give as final result of philosophical analysis the proposition that experience consists of states of consciousness is to give no explanation whatever, for it merely refers the facts for explanation to the facts themselves. A state of consciousness, even if we allow for the moment that some intelligible meaning can be attached to such an expression, is not *per se* an element of experience. It becomes so, or is for us a fact only in so far as it is cognised by the self or Ego, and it can be cognised only under the conditions of self-consciousness as such. So far from being an ultimate ground of explanation, states of consciousness are objects of cognition, and therefore merely parts of that completed whole which stands in need of explanation. Empirical psychology, therefore, which takes states of consciousness as known, and investigates their nature and connections, tracing out the laws of their combination, and considering their relations to the organised material of body and brain, is not even in sight of the problem which belongs to the theory of knowledge, and from which metaphysic starts. The question which that theory endeavours to answer, How is experience of any fact, even of a mental state, possible? is not to be identified with our analysis of the nature and relations of the fact when known as a portion of experience.

The distinction between the two problems, which is that between philosophy and science, and the absolute necessity of considering the first of them, are after all the most valuable lessons which the critical philosophy has given to subsequent thinking.[1]

Empirical science, it was further apparent, had its limits fixed through critical analysis of those notions by means of which a coherent experience becomes possible. Within the sphere of the categories of finite thought, *i.e.*, within the domain of matter and force, space and time, empirical science was possible and supreme. No proposition expressing the relations of facts discovered by experience could possibly throw light upon those conditions without which experience itself was impossible. No proposition as to the notions through which experience is possible can throw light upon the empirical connections of those facts, or can have more than regulative influence on empirical science. "In the explanation of given phenomena, no other things and no other grounds of explanation can be employed than those which stand in connection with the given phenomena according to the known laws of experience." Accordingly it may be said that, as one result of the Kantian analysis of knowledge, no scientific proposition as such is a theorem of philosophy, no philosophic theorem is a proposition of empirical science. It is impossible for pure thought in any manner to anticipate experience; no advance in any physical inquiry is to be gained through pure philosophy.[2] Rational science (*Natur-wissenschaft* as distinct from *Natur-lehre*) is, indeed, possible; for in the necessary conditions of experience we have at least certain ultimate elements of all known facts; and thus, in the physical sciences, strictly so-called, advance is to be expected through experiment, aided and systematised by mathematics. The final goal of such science is undoubtedly the complete exposition of all collocations of matter in space as dependent on space relations, and therefore as capable of mathematical expression.[3] It must be added, therefore, that only in a qualified sense can it be held that philosophy has to criticise the notions of science. It subjects them to criticism only in so far as they depend upon the ultimate conditions of knowledge as such. With any empirical conception of science philosophy has not to do.

In the sphere, then, of the relative categories, substance, cause, and reciprocity, and of the forms of intuition, space and time, within which the corresponding objects can be presented, science is supreme; beyond that sphere its categories have no validity. Cognition as such must be limited to intuition. Beyond the domain of possible intuition, there is left for us but the certainty of Reason, as conscious of its own free determination, with the necessary conditions of that consciousness. Thus the completed synthesis contemplated by Reason cannot speculatively be demonstrated, but is brought before us with practical certainty when we become aware of our own position as members of an intelligible system, as raised by Reason above the limited categories of sense intuition.

I know nothing that would be more instructive than a careful comparison of the theory thus briefly sketched with that form of idealism which, descending from Berkeley, has played so large a part in English thought. In some respects the ultimate metaphysical conceptions of the two theories are in agreement; both regard the visible order of things as but the mode in which the finite intelligence is conditioned or limited, and both suffer from the individualism which would make it appear that this visible order is but a projection of the individual's mind. But the Berkeleian idealism can never free itself from this defect, save by the violent assumption of objective principles, the warrant for which it neither investigates nor can give. The critical idealism, on the other hand, at least points the way to an objective view of things, for its analysis of knowledge enables us to see that the particular fluctuating element, let us call it the given impression, which was the ultimate fact to Berkeley, is never known as such, but only when determined by thought and as related to the objective system or order of things. On such a comparison, however, and on the results that might follow from it, my time does not permit me to enter, nor is it my intention to offer any detailed criticism on the Kantian theory itself. At various points throughout the exposition I have endeavoured to indicate that Kant's own teaching enables us to see how advance beyond his position is at least possible, and that the true significance of many distinctions first drawn by him can only be had by restatement and reconsideration of them. There is one point, however, on which, before proceeding further, it is necessary to direct special attention—that is the conception Kant appears to hold of what constitutes reality in knowledge. No one has shown with more thoroughness that the momentary and individual impressions of sense are to the cognitive subject himself unreal, uncognisable, and that they only become real for us in so far as qualified by thought and referred to the context of experience. Such reference is only through understanding, and understanding is throughout determined by Reason. Yet Kant singles out this essentially fluctuating and transitory element as the only reality, and in consequence is led apparently to reject as at least speculatively unreal the pure principles of Reason. Two remarks may be made on this matter. In the first place Kant's view of what constitutes *perception* as distinguished from sensation is very far from clear, and the psychological obscurities or ambiguities in his doctrine lead to statements which at times appear violently to contradict the transcendental or metaphysical analysis which is the very essence of his critique. The *reality* of one element in the completed intuition, the sensation itself, is not to be identified with, or explained by, the real occurrence of the impression on the senses or organised matter in connection with which it arises. That is a purely mechanical process, and can only become for us intelligible when we abstract from the context of experience, and consider the sensation as something mechanically resulting from natural forces, the external vibrations, affection of nerves, and so on. In so doing, however, we are dealing with the sensation as it does not exist for us, and as it is not an element *in* our perception at all.[4] Further, the sensuous factor in intuition is not to be identified with the sensation as known, still less with perception itself. Perception does, undoubtedly, contain the element of sensation, but the sensation as such never appears in the perceptive act. Perception is part of cognition, and may be explained as reference of the fact that sensation has taken place to the objective order of events on which its occurrence depends. Sensation, cognised as such, is one among other objects of knowledge, and can exist for us only in the context of experience which makes up knowledge. It is probable that Kant, in dealing with this question of the reality ascribed to perceived facts, was misled by the connotation attaching to the term, "affections of mind," which, with him, plays a part not unlike that of "states of consciousness" in more modern psychology. Affections of mind, like affections of body, are only parts of known material, and have for intelligence reality only in and through the context of experience constituted by thought. It is quite impossible for Kant to maintain both that unity of consciousness, and therefore thought, which goes beyond the individual fact, is indispensable for perception, and also that the only real factor in perception is that which, *per se*, is not for intelligence at all. It is quite impossible to maintain the absolute severance of thought and sense, when their unity is recognised as not mechanical but organic. Were it admitted that the impression is the only reality, then Hume's idea of a stream of isolated perceptions, an idea which for an intelligence is contradictory, would be the result of Kant's analysis.

In the second place, if reality in ultimate significance is not given in and by the individual impression, then we must reconsider Kant's view of Reason and its functions. For it must be asked whether the impossibility of having sense-intuition of the absolute is sufficient ground for the doctrine that knowledge of the supreme synthesis is speculatively but problematic. There is, doubtless, and will always remain, the marked distinction between thought related to or concerned with one particular portion of the sphere of intuition, or with the relation between the empirical elements of cognition, and thought related to the whole sphere of intuition as such, or to Nature. If, indeed, knowledge be arbitrarily *defined* as the combination of thought with a particular finite element of experience, then the problems of Reason must naturally be held to be beyond knowledge. But on Kant's own showing, if we are inevitably compelled to admit that the finitude of the categories of understanding points to the unity of Reason which transcends them, that the empirical matter of cognition and its forms are but the modes in which the supreme synthesis is realised in finite intelligence, then the doctrine of absolute ignorance as to this synthesis can no longer be regarded as tenable, at least when so expressed. For what kind of knowledge is it supposed that we are to have of the unconditioned, of the object of Reason? To Kant, apparently, a knowledge of it, apart from the manifestation which is an essential factor in it. If we consider fairly the Kantian doctrine of the Thing-in-itself, it is evident that this pure abstraction is what he contemplated, an abstraction which is philosophically the counterpart of the theological idea peculiar to Deism; and to Deism, we must admit, the Kantian principles directly lead. It is supposed that a knowledge of God must mean the comprehension of something entirely removed from experience, something to be qualified by none but negative predicates, the *θεὸς ἄγνωστος*, or *Deus absconditus*, which has played so remarkable a part in the history of human thought. If there is one notion which philosophy should have taught us utterly to reject, it is that of an absolute and unconditioned, which is absolute and unconditioned only through perfect vacuity, through containing nothing but negations. The most valuable lesson to be learned from Berkeley in some degree, from Hegel throughout, is the worthlessness and danger of abstractions, and the supreme abstraction is the unknown and unknowable God. Kant, it is true, partially freed himself from this obscure notion, and throughout the development of his philosophy one can trace the successive steps by which he endeavoured to render more and more concrete the ideal of the supreme intelligence, but even in the final form of his metaphysic, from his peculiar conception of the isolated sensuous impression as that which immediately brought us into contact with reality, and therefore of thought as merely secondary and in itself devoid of content, the old opposition appears between speculative knowledge and practical conviction. The full development of what is involved in Kant's original question, How is experience at all possible? would lead to a different conception of the relation between the elements which appear subjectively as Reason and Understanding, objectively as the supersensible and Nature. Only through such development can we adequately estimate the value of the Agnosticism which at present has taken the place of philosophical and theological speculation. It is an error to suppose that metaphysic desires to pass beyond experience, or to grasp anything whatever that is utterly dissevered from experience. Its object does not lie beyond the things we know. Metaphysic only desires to think experience, and its one rule is to avoid taking a part as explanation of the whole. Its ideal is the organic unity which Kant has so clearly sketched. If we choose to express it theologically, we may say that the only method of knowing God is through His manifestation, through the system of experience with which we are in connection through thought. We cannot know any being otherwise than by its manifestation. Its manifestation is its very being for us, and it is a mere effort of abstraction to distinguish between them and to imagine a knowledge of such being as it is not, and cannot be known.

A full discussion of Kant's relation to this particular problem, which is, indeed, but one of the modes in which the ultimate question of all metaphysical inquiry may be stated, would lead to more detailed criticism of his system than is here desirable. But it seemed specially important to point out how the apparently logical question which Kant sets in the foreground of the *Critique of Pure Reason* is directly and intimately connected with it, and that no approximation towards its solution is to be attained otherwise than by carrying forward the fundamental ideas of the Kantian philosophy. Quite possibly rigorous analysis of the conditions of experience, *i.e.*, of the notions by which experience is for us intelligible, may demonstrate to us that for finite intelligence complete comprehension of the ultimate synthesis is not to be obtained. But in that case we should have discovered the significance for us of those notions, and should have gained a deeper and truer idea of our relations to ultimate intelligence, and no philosophy can ever give us more.

I do not think it can be said that the relation of Kant to modern methods of speculation on this and allied problems has been fully recognised. To a large extent these methods have remained unaffected by the critical question, and bring forward their solutions with happy unconsciousness of the truth that the question requires to be answered before any real progress in philosophical conception can be achieved. In order to notice briefly one or two of the points with respect to which, as it seems to me, a return to the Kantian attitude is imperative, I shall comment upon the application of Kantianism to modern questions, which is given in Lange's *History of Materialism*. The principles of that work are professedly transformations of

Kantian doctrines, translations of them into the language of modern science. Here, then, if anywhere, we may expect to find the importance of Kant's general position recognised, and the special significance of his several doctrines illustrated by their application to modern difficulties. For Lange himself was a man of infinite quickness and capacity and of unwearied industry, well trained not only in philosophy but in general science, and imbued with what is vaguely spoken of as the "modern" spirit. His work, undoubtedly, did much to accelerate the current which had already set towards Kant, and has exercised a very powerful influence, not so much, perhaps, on purely philosophic thought, as on the speculations which occupy the border-ground between philosophy and natural science. Metaphysically inclined physicists, indeed, have derived, and still derive, much of their sustenance from Lange's work. Recognising the merits of the *History of Materialism*, I am yet unable to agree with the enthusiastic estimate of Lange's disciple, Dr. Vaihinger, who "does not hesitate to call the *History of Materialism* the most significant philosophic fact of the present time."[5] As a history, the work appears to me to have many faults. It reads later ideas and modes of conception into earlier theories, frequently violates the rule of historic proportion, and in several matters of detail is both defective and inaccurate.[6] Its value must be held to lie altogether in its general spirit, and in its criticism of materialism. The criticism is based on principles avowedly Kantian, but modified in harmony with modern and scientific theory, and the general spirit of the work is not inaptly indicated by the term "Neo-Kantianism" which has been applied to the movement started by it. As I shall have to point out, the Kantian principles employed appear to me to be emptied of all that gives them peculiar value, and the results of the criticism, so far as doctrine is concerned, seem no more satisfactory than violent amalgamations of physics and philosophy generally prove to be. I confess to a feeling of profound distrust of any philosophic doctrine which is presented as the result due to the "methods of modern science."

The first point for consideration is, naturally, the conception formed by Lange of the aim and purport of philosophy in general and of the Kantian criticism in particular. A definite response to such a query might easily be collected from various quarters in the *History*, but the following brief summary by Dr. Vaihinger will certainly not be regarded as unfair. "According to Lange, philosophy has first a negative, and second, a positive problem. The former is handled in Logic and Theory of Knowledge, the latter in speculative Metaphysics. The negative part is related to the positive as destructive criticism to dogma. As negative criticism, Philosophy has to show that it is itself, as a science, impossible; the critical theory of knowledge destroys all the claim of speculation to attainment of truth. . . . In its positive aspect, philosophy must certainly be speculative, but with perfect consciousness that its speculation is mere poetic fancy, not truth. We must speculatively fashion for ourselves a harmonious picture of the world, but must remain conscious that this is merely a subjective ideal, with no claim to represent reality."[7] From this one can see very fairly what is Lange's idea of the result of Kant's *Critique*. That result is for him demonstrated positivism. Only the mechanical, the sphere of sense intuition, has reality; within that sphere cognition is possible and the terms true and false may with significance be employed. Whatever lies beyond sense intuition lies beyond knowledge, and with respect to it the terms true and false must be devoid of signification and therefore inapplicable. Ideals we may form, which represent for us this dim and shadowy region, for there is in us, according to Lange, an organic impulse towards unity (this is his equivalent for *Reason*), and such ideals may have ethical worth, may be for the good of our souls; but it is the one lesson of philosophy to the individual that such ideals have no reality corresponding to them; subjective fancies they are and must remain.[8]

That such a doctrine has a superficial resemblance to the final propositions of the *Critique* may be granted; that it leaves out of consideration the unity of cognition which Kant so strenuously insisted upon, and consequently detaches certain theorems from the context within which alone they had in Criticism their full import, is, I think, beyond question. Only from an erroneous conception of the real significance, or rather, one would say, of the essential elements of Kant's theory of knowledge, could such deductions be drawn, and, as I shall immediately point out, the interpretation of that theory by Lange is entirely erroneous. A detached portion or aspect of the completed theory is taken by him as being the whole, and what he thinks to be the result of Kant's critique of knowledge is not, in truth, Kantian at all, but is the old Protagorean maxim of Relativity, of which it is no exaggeration to say that the *Critique* is the reasoned refutation. For this Relativism, particularly in its modern form, in which it is regarded as the solitary stronghold against materialism, is nothing but a re-statement of the theory of Hume, that the sum of cognised existence is the stream of conscious states, impressions, or ideas, without subject in whom they are united, or object to which they may be referred. The close analysis to which Kant subjected this doctrine, and the mode in which his fundamental theorem as to the limits of knowledge is connected with his exposition of thought as necessarily involved in intuition, seem to be entirely overlooked. Lange's doctrine of knowledge, therefore, presents itself to me not as the translation of Kant into the terms of modern scientific thought, but as the reproduction of Hume in terms of modern physiological psychology.

Before noting the new foundation which Lange proposes to give this view, it may be permitted to remark that the title applied to it, *relativism,* is altogether misleading and out of place. If absolutely the sum and substance of cognition consist in states of consciousness (it being granted for the moment that some intelligible conception of such a theorem could be formed), then clearly there is nothing to which such cognition can be in relation, there is nothing more to be known. The petty difficulties as to variation of sensations in health or disease, generally employed to illustrate the limited and subjective nature of our cognition cannot be held as in point, for they simply indicate differences between certain classes of things known. Further, nothing in consciousness itself can be conceived as "pointing to something beyond," an ambiguous expression, which Lange, strangely enough, employs. For it must be remembered that when conscious states are regarded as so many separate facts, each with its definite nature (for all the world like so many beads on a string), there is no possibility of relation among them. A conscious state, conceived by itself, as Kant is never wearied of pointing out, is a thing in itself, and by no ingenuity can we conjure out of it relations to other things. It is incredible the difficulty and absurdity which beset us when we endeavour to regard *phenomena* or *states* of consciousness as so many objects, atoms. It may be added that no such abnormal state as an "indefinable consciousness" can be allowed to have any pertinency as explanation of the fact that we somehow distinguish the series of subjective, individual, or personal phenomena from that which is objective.[9] The doctrine of Relativity, as usually held by empiricists, has significance only under the pre-supposition of an objective system of things acting in definite ways upon a sensitive organism, and having as effect the various states of consciousness which make up the substance of cognition or conscious experience.[10] For, in such a case, we may readily proceed to doubt the objective validity of the assumption with which we started, and may demonstrate "by the slightest philosophy" that if only effects are known, causes must remain unknown. It would be unjust to credit any thinker with such a crude philosophical conception, save on the clearest evidence; but I think it will become quite apparent that this and nothing further is the first principle of Lange's theory of knowledge.

As has been pointed out above, Lange substitutes for Reason in the Kantian system an impulse towards unity which is somehow imbedded in our organisation. From what will later appear as regards this organisation it may be at least doubted how we come to discern in it any such impulse towards philosophical unity, for we must suppose that the organisation referred to is the ultimate basis of what in perception is presented to us—in which case it is the absolutely unknown. This, however, may be permitted to pass without further comment. In a quite similar manner Lange substitutes for Kant's deep-going idea of self-consciousness as the one condition of knowledge, the necessary dependence of objects known on the nature and conditions of our organisation—an organisation which it is remarked, may with philosophical correctness be called indifferently psychical or physical. "Whenever it has been shown that the quality of our sense-perceptions is completely conditioned by the peculiarity of our organs, then we can no longer dismiss as 'incontrovertible but absurd' the view that the whole orderly connection in which we arrange sense-perceptions, in a word, our whole experience, is conditioned by a psychical organisation, which compels us to experience as we do experience, to think as we do think, while to another organisation the same objects might appear quite differently,—and that the thing-in-itself cannot be an object of knowledge to any finite being." "It is an immediate consequence" (*i.e.* of the Kantian theory) "that objects of experience are only objects *for us*,—in a word, that objectivity is not absolute objectivity, but only objectivity for men and any similarly organised beings, while behind the world of phenomena the absolute essence of things—the thing-in-itself—remains in impenetrable obscurity."[11]

Although Lange professedly bases this fundamental doctrine on Kant, he really supports it by, or deduces it from what is vaguely described as the physiology of the senses, and it was surely unnecessary to invoke the great name of Kant for such a theorem. Nay, it is more than unnecessary, it is positively erroneous. To imagine that Kant's doctrine of the transcendental ideality of space and time is to be entirely identified with the simple proposition that sense phenomena vary according to the organs of sense is to misunderstand its true significance and to overlook Kant's very express declarations. The subjectivity of the so-called secondary qualities is not in kind the same as the subjectivity of the pure intuitions. The facts made known to us in respect to these qualities by the psychology of sensation are interesting and valuable as empirical results, but they lie entirely within the sphere of phenomena, and do not furnish the ground for distinguishing phenomena as such from things in themselves. The relation between special inner states and the action of external vibration and nerve mechanism is a fact of experience, presupposing the cognition of phenomena as such, and can throw no light whatsoever on the fundamental conditions of sense perception itself. We ought not to confound the questions as to the possibility of cognising phenomena of sense, and as to special empirical relations between these phenomena.[12]

I may remark further, with respect to Lange's fundamental doctrine, that the impossibility of cognising the *thing-in-itself* may have very various meanings for different thinkers. In Kant, as we have already seen, it is simply the expression for the distinction between the unity attainable through the finite and relative categories of understanding and the unity which is held before us by Reason. We saw, also, how the nature of this thing-in-itself was gradually determined, until it at length appeared as pointing to the supreme synthesis of intelligence and objects manifested in the forms of phenomena to finite cognition. Now this is not in any sense Lange's view. To him the thing-in-itself is presented as the unknown cause of the special modifications of consciousness, and remains unknown simply through being the cause. Such a theory has no meaning, unless combined with the peculiar assumption which, as already indicated, may be detected as lying at the foundation of modern relativism. To base the limitation of cognition on the facts of sense perception as disclosed by physiological psychology, does not then seem to me a very fruitful method, and I cannot agree with Dr. Vaihinger, who thinks that Lange's special superiority over Kant lies in the fact "that he brings to bear on the problems of the *Kritik* the results of modern physiology and psychology, and is thus enabled to construct an almost irrefragable theory of cognition."[13]

On the whole, then, Lange's first principle is nothing but the usual formula of subjective idealism. All that is known is the series of conscious states, or, to use the ambiguous term which plays as distracting a *rôle* in German philosophical literature as *idea* in English, we know only *Vorstellungen*. Now Lange apparently thinks that so soon as we have reached the conviction that all our knowledge is of *Vorstellungen*, we at once become aware that experience is necessarily relative, "phenomenal of the unknown," and in this way there would seem to be gained a kind of foundation for the doctrine of the thing-in-itself. The consequence, however, is quite illogical, and is not in any way to be regarded as a mere repetition of the expression common in Kant, that *phenomena* imply *noumena*. It has a show of validity solely from the ambiguity attaching to the term *Vorstellungen*, and from the resulting laxity with which the first principle of the doctrine of knowledge is interpreted. We are inclined to think that "mere ideas," mere products of the laws of my sensibility and understanding, must have a cause; but if our knowledge be really limited to, or rather made up of these ideas, we cannot qualify them as "mere representations," or refer to any cause not contained among them. Lange is here involved in an inextricable confusion between his relativist interpretation of the *thing-in-itself* and the significance which Cohen's work had shown him really belonged to that notion in Kant. He endeavours in vain to reconcile the principle that the *thing-in-itself* is only a limiting notion with the view of the *thing* as operating on the organisation.[14]

The series of *Vorstellungen*, then, is the sum of experience, and therefore of existence for us. One need not now ask if knowledge is hereby explained; if there is not a radical distinction between consciousness of a series of *Vorstellungen* and the series conceived as existing *per se*, without a unity to which they are referred; or, finally, if knowledge does not involve relations among the several elements in the series of *Vorstellungen*, which must be impossible were there not some connecting link, some unity in which they may be compared. All these problems, the very questions which in effect Kant puts to Hume, are entirely overlooked in this translation of Kant into the language of modern science. Merely noting their omission, however, I proceed to consider somewhat more carefully the further explication of Lange's fundamental theorem. Evidently in that a most significant part is played by the *organisation.* Now, what is this organisation? If it is something known, then, as the principle of relativism is all-inclusive, it too must consist of *Vorstellungen,* and this is at least the first form of Lange's explanation. "We remark," he says, "that the same mechanism which produces all our sensations also produces our representations of Matter. Matter as a whole may be, nay, must be, a product of our organisation, just as well as colour, or any modification of colour. Whence it may be understood that it is almost the same thing whether we speak of a psychical or of a physical organisation—for that physical organisation is merely a *Vorstellung* of mine and cannot be in its essence distinct from what I call psychical."[15] It would appear to follow from this, which is at least a logical deduction from the principle of relativity, that the organisation as known is a complex of representations (*Vorstellungen*), and consequently that the organisation which really *produces Vorstellungen* is not the organisation as known to us. Contradictory as such a proposition may appear to be to his first assertion, such is Lange's view. He sums up his doctrine of knowledge in the following brief statements:—"*1st,* The world of the senses is a product of our organisation. *2d,* Our visible corporeal organs, like all other parts of the world of phenomena, are only pictures of an unknown object. *3d,* The transcendent ground of our organisation remains quite as unknown to us as the things which operate upon it. We have only before us the product of the two."[16] Here comes forward without any disguise the crude assumption upon which the doctrine of Relativism is based, and it is scarcely necessary to criticise it further. With particular reference to Lange, however, it may be pointed out that the dependence of the world of sense on organisation is proved by facts which imply that the organisation in question is that known to us. We nowhere come in contact with the unknown organisation which appears when the theorem of relativity is made universal, and, in fact, to make it as first stated, universal, is the most effective mode of exhibiting its one-sided and partial character. The same peculiar *saltus* is found in most of those theories which find ultimate explanation in reference to the Unknown and Unknowable.[17]

On comparing, then, Lange's first principle of the theory of cognition with the question placed before himself by Kant, and the answer given by him to it, I cannot but come to the conclusion that the essential element in the critical method has not been duly apprehended, and that no amount of psychological or physiological detail will advance the solution of purely metaphysical problems until their relations to the Kantian criticism has been more accurately determined. These details concern matters within, and subordinate to the distinction which is drawn in knowledge properly so called between self-knowing and objects known, and it is with the full analysis of the nature and significance of the distinction itself that philosophy is primarily concerned. To bring forward as an equivalent for self-consciousness with its conditions, the series of sensations with their organic accompaniments, is really to ignore the work of the critical philosophy, and to return to the earlier stand-point of pure phenomenalism. As to the mode in which Lange, carrying out his new conception of the fundamental fact in cognition, translates the doctrines of the Æsthetic, Analytic, and Dialectic, a briefer notice will be sufficient. He objects, naturally, to Kant's method of discovering the *a priori* element in knowledge,—a method which, according to him, "can be none other than the method of induction" — but he approves of Kant for having "raised sensibility to an equal rank with understanding as a source of knowledge" —a statement so ambiguous that, despite its appearance, it may be correct.[18] He thinks that motion and permanence should be added to space and time as forms of intuition, and, as might be anticipated, is dissatisfied with Kant's discovery of the categories through the table of logical judgment.[19] I shall not offer any comment on these criticisms, though some of them might well give rise to discussion. *A-priority* Lange is willing to admit, though only in a sense suited to modern science. There are certain organic conditions, structural dispositions of our organisation, which give rise to the necessary relations in the representations produced through them. Thus "even if space and time are not ready-made forms which receive a content only through our intercourse with things, they may yet be forms which by means of organic conditions necessarily arise out of the mechanism of sensation. . . . The fact is evident that the psycho-physical disposition through which we are compelled to perceive things in space and time is in every case given before experience, and in so far as the very first sensation of an external thing must be accompanied by a representation of space, be it ever so obscure, space is a mode of intuition given *a priori*."[20] Quite the same line of reasoning applies to the categories: they, too, are but expressions of certain structural arrangements in our organism. "To put it accurately, it is not notions themselves that are given prior to experience, but only certain (organic) dispositions through which the effects of the external world are combined and ordered according to the rule prescribed by these notions." . . . "Perhaps," he adds, "the foundation of the notion of cause may be discovered in the mechanism of reflex movement or sympathetic irritation; then we should have translated Kant's pure reason into physiology, and thereby rendered it more evident."[21] Apart from any criticism on this "physiological deduction" of Kant which might be suggested by doubt as to what organisation Lange is really referring to, it may be permitted to remark that a mechanical disposition or arrangement of parts, whether in the sympathetic nervous system or any other portion of the organism, is merely one of many "representations" (*Vorstellungen*) in the form of space. Now space cannot be regarded as being in itself the ground for the supposed connection of parts through which a new mental product, such as the notion of cause, might be evolved, for space is merely the ground of the possibility of external or mechanical arrangement. Even if we could, as the result of observation and experiment, point to some special mechanical arrangement of parts of our organism as invariably associated with the notion of cause, we must still admit that the ultimate ground of the notion is not in the mechanism itself. Lange would probably refer in this case to the unknown cause of the mechanism,—which is merely to leave the problem where it stood. Reference of all difficulties to the unknown seems, indeed, the last resort of empiricism in philosophy. It may be added that the detection of a special organic arrangement, as the corresponding element to any particular mental connection, is a matter concerning positive science only, and throws no light on the metaphysical or philosophical problem which lies in the background.[22]

With his newly expressed theory of knowledge Lange then proceeds to consider those questions which may be said, on the whole, to resemble those dealt with under the transcendental dialectic. The relation between the psychical and the physical, the idea of end in relation to mechanism, and the nature of the ideals, moral, religious, and social, which the human mind seems irresistibly constrained to form, are successively submitted to examination.

With respect to the first of these, Lange's theory appears to resemble what has been called Monism, though under that title many widely differing doctrines have been grouped. He rightly points out that, if we draw a distinction between physical and psychical, we cannot regard the peculiar fact in question, the subjective state of consciousness, as a product *in rerum natura* over and above the physical process in brain and nerves, without thereby violating the physical axiom of the conservation of force.[23] One would be inclined, indeed, to push the same line of reasoning farther, and to maintain that we have not and cannot have any sound conception of causal connection apart from the relations of extended substances in space. Matter in motion seems the one objective fact to which we can properly apply the category of cause. The notion of cause proves itself quite inadequate when we endeavour to determine by its means such a relation as that involved in conscious action, as when we say, we are the cause of our actions, or even an idea is the cause of an act. The relation of ground or determination, in short, is not to be identified with the causal. And in the highest reference, when we attempt to think by means of the causal nexus the mode in which supreme intelligence might stand to the world of phenomena, the contradictions which at once manifest themselves suffice to show that such a form is entirely inadequate and unsuitable to the matter brought under it. It is not possible for us to think God as the cause of the universe, unless we deprive that notion of all its significance when we apply it to determine the relations of material phenomena.

Leaving, however, the general consideration of cause, we have now to see how Lange explains the peculiar relation of physical and psychical. They are, he thinks, two aspects of the same fact. That which in its objective aspect appears as motion in the brain and nerve substance, is subjectively a state of consciousness. The total series of facts, psychical and physical, which appears to us twofold, is in reality but one. Nor is there any means of connecting the two series. Physical facts, *as known to us*, cannot possibly account for psychical processes. When we treat of them psychologically, we deal solely with the inner aspect; when we treat of them physically or scientifically, we deal solely with the outer aspect. A true materialism is thus at the same time a consistent idealism. Neither objective aspect nor subjective aspect is the reality itself: "ultimately," as Mr. Herbert Spencer puts it, "it is one and the same reality that is manifested to us subjectively and objectively."[24]

Monism, even so crudely expressed, is a theory which might be held by thinkers whose fundamental principles differed widely. In regard to the mode in which it is stated by Lange, two points seem to call for attention. In the first place, we must notice that subjective and objective, the aspects of reality, are in themselves a series of states, *phenomena*, isolated from one another, but known. To the thinking individual they are manifested as two, though in essence one. (I may say that it is not quite clear what is to be understood by their essential unity, whether they are one in the sense of being double faces of one thing which has no existence apart from these aspects, or one as modes in which a really existing entity manifests itself. But the same argument applies to either.) They are, therefore, cognised, known in consciousness and under the forms of consciousness. To say that the way in which the one essence appears as twofold transcends natural explanation is to say nothing. We are here dealing with a fact which is necessarily beyond natural or scientific explanation in its restricted significance. Incompetency of natural explanation appears only because we are attempting to think of the cognitive subject as one object connected with others after the fashion in which these are connected with one another. The problem, therefore, remains entirely where it was. There is physical, there is psychical, and both are known to the thinking subject.[25]

In the second place, with his Monism Lange unites what may with justice be described as subjective idealism. "Not only the external world, but also the organs with which we apprehend it, must be treated as mere pictures of the truly real."[26] It would follow, therefore, that differences in phenomena are only differences of *Vorstellungen*, and that a difference in kind cannot be explained by reference to anything within the sphere of *Vorstellungen* themselves. The particular difference in question, moreover, must lie exactly where Kant placed it; the one set of facts is material of external intuition, the other is the material of internal intuition. If with this conception of the difference we attempt to construe Monism consistently, we shall find insuperable difficulty. Either there is no objective aspect at all, which would really be the most logical conclusion from subjective idealism, or else the objective aspect for one individual is simply the idea of what would be a subjective state for some other individual. Consider, for example, the group of sensations, etc., which we call perception of an external form, say a circle. According to the Monist view there is, alongside of these sensations, a series of processes which make up the objective aspect. But for the individual this objective aspect is non-existent. When, to take entirely the position of the subjective idealist, we think of this objective series, we do so by representing it as an object to be perceived—that is to say, as a series of sensations in our own mind, or in the mind of an observer. It has no more of objective in it than the circular form. If we are true to the position of subjective idealism, we must give up this attempt to mix together the transcendental consideration of the object known with the purely psychological or scientific discussion of the relation between organism and sensuous states. The two questions lie in totally diverse spheres, and only confusion results from attempting to combine their treatment in one doctrine.[27]

So far as I can judge, this particular problem remains very much where it was left by Kant. The results of his examination, the solid bases for any further discussion, were mainly two; that the categories of external relation could not be applied to inner states, and that the external, as known to us, could not be taken to be the cause of the internal, as known to us. The distinction of external and internal thus appears as one lying within the ultimate distinction in cognition, and consequently any form of Monism which appears as solution must be one in which the notions employed are not those of mechanical or external relation. In other words, no scientific answer—taking scientific in the Kantian sense—is to be expected. We cannot say that inner and outer are one as substance, which is the Spinozistic view and that of modern physiological psychology; nor that inner and outer are two as substances, which is the Cartesian idea and that of popular thought; but we may say that the two are united in knowledge, that what we call the physical is not there for us in its full reality until grasped and apprehended in consciousness. The totality of things is that in which the physical exists in and for consciousness. In such a metaphysical conception there is not involved any contradiction between thought and mechanical law. The supremacy of mechanism has its due place and its full right. The external is but the mode in and through which the internal is manifested, and no manifestation in the external requires to violate mechanical law.

A similar line of thought, bearing on the relation between reason and the mechanism of understanding, should be applied to the obscure notion of end or design. The categories of substance, cause, and reciprocity, which are supreme over external phenomena, concern only the relations among themselves of given parts. They consequently assume or imply a given mechanism within which they are applicable, and consequently furnish no explanation either of the mechanism itself or of anything beyond its changes. Given a particular relation of parts or forces, and, under due assumptions, we can determine the consequences of a new antecedent; but neither the original relations of the parts nor the nature of the change itself can be mechanically determined. It would, therefore, follow that no argument from the mere existence of a mechanism in nature can in any manner affect the doctrine of design, unless it be thought that design is itself an external relation, which would contradict our mechanical idea. At the same time it must be emphatically expressed that the peculiar relation between organ and function is one to be discovered by observation and not anticipated by any *a priori* reasoning. We are too apt to read our partial interpretations into nature, and to construe by the scanty knowledge of nature which we actually possess. Moreover, it must also be held that the Kantian limitation of end to metaphysic is thoroughly justified. No scientific insight is gained through the notion of design or purpose, nor do we scientifically explain by its means. The notion is purely metaphysical, and rests ultimately upon the thought relation between reason and the world of things presented to understanding in the form of mechanism. Explanations limited to the scientific are modal, *i.e.* state the modes or ways in which the phenomenal appears, and are consequently never exhaustive. We have still to think the relation of the individual to the whole system of facts, the universe, within which he has his existence, and it is here that the notion of end has its place. Interesting, then, as are the discoveries and discussions relating to the nature and modification of organisms, they affect only the erroneous and limited conceptions of teleology which are still too prevalent. So soon as we take the rational view, we must see that not in this or that inner detail of animal or vegetable economy is design to be traced, but that the true import of the idea is that of intelligibility of the universe—an intelligibility by no means exhausted in mechanical relations.[28]

On the final doctrine in Lange's Neo-Kantianism I may be very brief, for the problems to which it is put forward as an answer were considered, so far as space permitted, in the early part of this lecture. Lange's view is one of the many modifications of Agnosticism. The ideas of God, the soul, and immortality, are but poetic fictions, with no claim to represent reality, products of mechanism, but valuable as tending to elevate our thoughts above the details of knowledge and daily life. Psychologically they are mere cobwebs of the brain, but have two characteristics which distinguish them from mere phantasmata. They are not peculiar to this or that individual, but spring from the common nature of humanity; and, secondly, they have ethical value, indeed, they are based on the ethical idea of *worth* or importance for the elevation of life.[29]

Apart from the facts that the idea of ethical worth is one strangely out of harmony with Lange's first principles, and that much is ascribed to the common basis of human nature to which it does not seem competent, I cannot see in this more than a mangled reproduction of the ideas of the Kantian metaphysic, together with the dogmatic assertion, from which Kant wisely refrained, that beyond natural mechanism there is no reality. It does not seem necessary to enter on any detailed criticism of a view which seems quite irreconcilable with the subjective idealism of the theory of knowledge on which it rests.

I selected Lange as representing one phase of modern thought, because from his dependence on Kantianism there come forward more definitely in him than in any other writer known to me those problems previously noted as of special interest in our times. The relation of the individual to the universe, the nature of this known universe, the particular relation between physical and psychical, with such ethical and social consequences as may follow therefrom, are all treated by Lange in a fashion which seems to me fairly to represent a considerable and important current of modern speculations.

On all such problems the only true method of procedure appears to me that indicated by the critical philosophy. I am far from maintaining that in Kant satisfaction for all speculative difficulties is to be found, for his system has manifested inner want of consistency and evident incompleteness. We cannot at once accept reason as supreme and self-determining, and maintain that reality, as such, as given only in sense-intuition; we cannot at once hold that reason is in itself concrete and that it is purely abstract. But the method indicated in the critical philosophy, by which the final problems of metaphysic, What ought I to do? What can I expect? are made to turn upon the question, What can I know? seems to me the only sound and fruitful basis for speculation. To some extent it must be granted that previous thinkers, such as Locke and Berkeley, had drawn attention to an analysis of knowledge as the essential portion of philosophy, but in none of them was the problem of knowledge raised to its ultimate abstraction, or made perfectly general, and as a consequence, their work was of service only for psychology. To them analysis of knowledge meant analysis of the contents of the individual consciousness. On the other hand, the *Kritik* raised the fundamental question as to the possibility of knowledge, even of the knowledge of self which is usually taken for granted as certain. It can hardly be too strongly impressed on the student of philosophy that the ordinary method of starting in constructive metaphysic with the Cartesian certainty of one's own existence is misleading and likely to entail the gravest error. No consciousness of self is possible, save in relation to a system of facts, of whatever nature, differing from the unity of the self cognising them. It is from Kant's recognition of this essential duality in knowledge, this organic unity between the cognitive subject and the system of cognised fact, that the importance of his analysis of knowledge arises. It thereby becomes with him the propædeutic to metaphysical speculation. The minute analysis of self-consciousness, as was formerly said, may seem to lead to a merely logical formalism, a kind of empty framework of notions into which concrete material of knowledge falls; but this is to take but a partial view of the matter. Full knowledge of a single fact is possible only through universal knowledge; knowledge of self contains implicitly the whole system of thoughts through which the relations of the individual to the universe may be known, and by means of which answers, such as are possible, may be given to those problems which concern his nature and destiny. Implicitly these thoughts are contained there, but it is far from necessary that they should be realised in the consciousness of the individual. The complete and methodical analysis of the conditions of experience is nothing but the explicit statement of these thoughts, and towards such explicit statement the first essays were made in the Kantian philosophy.

As it seems to me, then, Kant's declaration to the metaphysicians of his own time, that they were solemnly interdicted from their functions until they should have considered the question, How are synthetic *a priori* judgments possible? may be repeated now in its most general form. Until philosophy has taken up *de novo* the problem as to the possibility of experience at all, it must remain not only infinitely removed from the solution of metaphysical problems, but absolutely incapable of stating these problems in the form under which they must be contemplated. No danger is so great in metaphysic as an ill-framed question; and without patient, minute analysis of thought we cannot really test the significance or import of metaphysical difficulties.

I do not think it, then, an unfair conclusion to be drawn from the consideration of the present state of philosophy, that the return to Kant has really been due to the pressing need for some objective, well-grounded theory of knowledge. Without such theory, metaphysical speculation must remain an airy fabric without solidity or foundation, within which we may live, if we so choose, but which can lay no claim to real existence or worth for thought. As the impulse towards metaphysical construction can never cease so long as reason continues, it is surely of importance that the way should be cleared by a thorough-going analysis of reason itself. Such analysis, or at least the first sketch of it, was given by Kant, and from his time the questions of philosophy have assumed a new form. If we, too, are to connect our knowledge into coherency and system, and to understand, so far as it may be given to us, the significance of the universe in which we find ourselves, we must resume the problem as it came from the hands of Kant. No earlier method is now of service; no method that is unaffected by criticism can adequately attempt the problems of modern thought. To understand itself, and to push forward to new solutions, it is imperative that our philosophy should return to Kant.

NOTES TO LECTURE I.

[References to Kant's *Works* are to the edition of Rosenkranz and Schubert; to the *Kritik* alone, in Hartenstein's reprint, 1868; to the *Kritik der prak. Vern.*, in the 1791 edition.]

[1] The works which mark this renewal of interest in the Kantian system are extremely numerous. It is possible, perhaps, to date the revived study of criticism in its special reference to modern problems from the years 1865-6, though in this connection Zeller's essay (*Ueber Bedeutung und Aufgabe der Erkenntniss-theorie*, 1862; republished, with *additions*, in *Vorträge und Abhandlungen*, 2te Sammlung, 1877) should not be forgotten. In 1865 Liebmann, an earnest student of the critical philosophy, published his *Kant und die Epigonen*, the burden of which is the necessity of return to Kant and examination of the problem of knowledge from his point of view. In 1866 appeared the first edition of Lange's *Geschichte des Materialismus*, a work which had at least the merit of having brought into close relation Kantianism and modern physical science, and which may be regarded as the completed statement of the so-called Neo-Kantian views. Of the numerous works which followed in quick succession after the movement was fairly started, the following are the most important:—Cohen, *Kant's Theorie der Erfahrung*, 1871, and *Kant's Begründung der Ethik*, 1877 (remarkable for exactness of exposition, though at times interpreting

Kant in greater accordance with psychology than is desirable or appropriate); Arnoldt, *Kant's transcendentale Idealität d. Raumes u. d. Zeit,* 1870 (with particular reference to the dispute between Kuno Fischer and Trendelenburg, but containing much valuable matter on Kant's theory of *Intuition*); Stadler, *Kant's Teleologie,* 1874, and *Grundsätze der reinen Erkenntniss-theorie in der K'schen Philosophie,* 1876; Hölder, *Darstellung d. K'schen Erkenntnisstheorie,* 1874 (one of the clearest and best monographs on the subject); Laas, *Die Analogien der Erfahrung,* 1876 (a critical review of Kant's teaching on Substance, Cause, and Reciprocity, from the standpoint of modified empiricism); Riehl, *Der Philosophische Kriticismus,* I., 1876 (a very fresh study of Kant's method in relation to Hume and his immediate predecessors, inclining to regard Criticism as the foundation of Positivism); Montgomery, *K'sche Erkenntniss-theorie,* 1871 (interesting from the point of view taken, that of extreme empiricism; for *a priori* intuition Montgomery substitutes the muscular sense); Thiele, *Kant's Intellectuelle Anschauung,* 1876 (traces very carefully the several stages of Kant's opinion with regard to intellectual intuition, and points out the importance of the notion for adequate comprehension of Kant's position).

On points of detail treatises and pamphlets are too numerous to be mentioned; Bergmann, Asmus, Leclair, Ueberhorst, Jacobson, Grapengiesser, Meyer, Witte, Wangenheim, Dorner, Zange, Krause, have handled the relations of Kant to philosophy in general, the psychological element in the critique, the connection between Kant and Fries, the doctrine of the categories, the theory of space, etc.; in short, a whole literature, critical and controversial, has grown up around the *Kritik,* which bids fair to be buried under its commentaries.

The new movement has not been confined to Germany. In French there have appeared recently at least two accurate accounts of the Kantian system: Desdouits, *Philosophie de K. d'apres les trois Critiques*, 1876; and Nolen, *La Critique de Kant et la Metaphysique de Leibnitz*, 1875. The earlier work of Vacherot (*Metaphysique et Science*, 1858, 2d ed. 1863) is still the most thorough and appreciative. In England real study of German thought dates from the appearance of Dr. Hutchison Stirling's *Secret of Hegel*, 1865. Some assistance was given by Professor Mahaffy's translation of Kuno Fischer's *Commentary* (1866); and, not to mention writings more or less informed by the Kantian principles, we have had recently from Professor Caird (*Phil. of Kant*, 1877) a most thorough and penetrating review of the *Critique of Pure Reason.*

In many works, not officially devoted to Kant, discussions of his philosophy form the principal element. Among such may be mentioned Göring (*C*), *System der Kritischen Philosophie*, 1874-5; Spir, *Denken und Wirklichkeit* (2d ed.) 1877; Caspari, *Grundprobleme der Erkenntniss-theorie*, 1876; Liebmann, *Zur Analysis der Wirklichkeit*, 1877.

[2] Particularly valuable in this respect is the work of Cohen above referred to (*Kant's Theorie der Erfahrung*), though in it the influence of ideas dependent on the Herbartian psychology is at times too apparent. The historical evolution of Kant's own opinions has been most carefully studied, and must be looked upon as an indispensable preliminary to complete understanding of the *Kritiken.* In addition to K. Fischer's review of the precritical works (*Gesch. d. neu. Phil.* III.), the following are particularly valuable:—Michelis, *Kant vor und nach* 1770;

1871 ; Cohen, *Systematische Begriffe in K.'s vorkritischen Schriften*, 1873 ; Paulsen, *Entwicklungsgeschichte der K'schen Erkenntniss-theorie*, 1875 ; Benno Erdmann, Preface to *Prolegomena*, 1878 ; *Kant's Kriticismus in d. ersten u. zweit. Auflage der Kr. d. r. V.*, 1878 ; and edition of the *Kritik d. r. V.*, 1878.

[3] Ultimately the problems raised by science and philosophy must coincide, for both science and philosophy are expressions of the same tendency towards unity of cognition. Both are efforts to render intelligible the details of experience which appear at first sight heterogeneous and irrational. Both, consequently, bring to the consideration of experience the one assumption of its final intelligibility. Only through careful analysis of what is involved in this assumption, and requisite in order that it may be realised or cease to be a merely general prescript, can it be discovered how the methods of the special sciences and of science as a whole, are related to and differ from the method of philosophy proper. It has been the misfortune of recent thought to neglect the close connection between the two, to oppose them to one another, and consequently to strive after the reduction of one to the other. To solve the ultimate problem of speculation by the method of science, strictly regarded, is as hopeless as the attempt to advance experimental or physical science by the speculative method. Possibly we may discover in Cartesianism, where the unity of philosophy and science is a fundamental idea, the germs of the later opposition between them, for in Cartesianism the purely speculative method and the modern doctrine of external mechanism appear side by side, and give rise to widely divergent streams of thought.

[4] It would not be impossible to show that the development of Berkeley's thought leads him from the crude position of individualistic idealism, first assumed in the *Commonplace Book* and *Principles*, to a view of the nature of the sense world, or world of phenomena, in fundamental harmony with that of Kant. For although Berkeley never quite frees himself from the influence of the subjective idea (see for a peculiarly gross example of the lengths to which this may be carried, *Princ.* § 94, "Did men but consider that the sun, moon, and stars, and every other object of the senses, are *only* so many sensations in their minds, which have no other existence but barely being perceived, doubtless they would never fall down and worship their own *ideas*"), yet his doctrine of sense-symbolism, his contrast of physical and efficient causality, and the hints given in *Siris* towards a comprehension of the infinite mind and its archetypes, carry him far from his first position. The occurrence of a sense-idea must be distinguished from the sense-idea itself, and the *occurrences* of phenomena make up the matter of sense-symbolism or order of nature. Such order of nature is not self-explaining, and must be referred to the action of the divine cause. It is, in fact, the mode in which the divine thought manifests itself to finite intelligence, and the divine ideas or archetypes are the originals of the special connections or forms which the finite intelligence receives. This is not far removed from the final position of Kant, but in it, even more than in Kant, we feel the impossibility of explaining the relation of infinite and finite by the limited category of cause. In his whole view of physical causation and of the (to finite minds) arbitrary action of the Deity, Berkeley has not advanced beyond the Cartesian position, specially as in Malebranche. And the supreme difficulty of Carte-

sianism, the connection between Extension and Thought, reappears in Berkeley in the opposition between the active finite Ego and the passive or necessitated world of sense-phenomena. Berkeley nowhere manages to clear up his notion of Power or Force, and his *Siris* particularly seems to confuse Intelligence, as ultimate ground of the phenomenal world, with intelligence as a force effecting special physical changes. On other points in Berkeley's doctrine, *e.g.*, on the origin of externality, or the permanence of the Ego, the limits of a note forbid me to enter.

[5] The criterion of "distinctness," or power of separating ideas, is used throughout by Hume in his proof of ultimate unconnectedness among the facts of experience. It is this principle which supplies the foundation for his criticism of our knowledge of real existence, and though in appearance he allows certainty to knowledge of abstract quantitative relations, it is doubtful whether he did not in the end return to his earlier doctrine that mathematics rest on sense experience. Ultimately, then, there is only the stream of isolated perceptions, *conjoined* but not *connected.* —*Works* (ed. 1854) I. 116, 181.

[6] It might almost be said that scientific thought has returned to the position so boldly sketched by Descartes at the beginning of the 17th century, and the analogies between the difficulties now raised through the procedure of science and the perplexities of the Cartesian physics and psychology, lend additional force to this opinion. The Cartesian doctrines (1) of mathematico-mechanics as the universal science of nature, (2) of the uniformity of matter, (3) of the constant quantity of motion in the physical universe, (4) of life as a special form of mechanism, are essentially the ideas of modern physical science.

See Prof. Huxley *On Descartes' Discourse on Method*, Selected Essays, pp. 119, *sqq.*; Papillon, *Histoire de la Phil. Moderne dans ses Rapports avec le Développement des Sciences de la Nature*, I. 94-149 ; Bordas De Moulin, *Le Cartesianisme.*

For the expression *categories*, as applied to physical science, see Hegel, *Encyklopädie*, II., (1), 19.

[7] "The proximate causes which we assume for the phenomena of nature may be either unchangeable or changeable ; if the latter, then the same fundamental principle compels us to seek other causes for this change, and to proceed in our search until at last we reach ultimate causes, operating according to unchangeable laws, and consequently at all times, under the same circumstances, producing the same effects. The ultimate aim of the theoretical sciences of nature is thus to find the ultimate unchangeable causes of natural processes.

"We do not require here to decide whether in reality all processes must be referred to such causes, *i.e.* whether nature must be completely intelligible, or whether there are some changes not subject to the law of necessary causal nexus, but falling within the sphere of spontaneity or freedom ; it is perfectly clear, however, that *science*, whose aim is to understand nature, must start from the assumption of its intelligibility, must draw its inferences and proceed in its investigations in accordance with this assumption, until, perchance, incontrovertible facts compel a recognition of the limits of the principle.

"We have seen above that the phenomena of nature must be referred to unchangeable ultimate causes ; this demand may be expressed in other words, thus :—as ultimate causes we must find forces unchanging in time.

Portions of matter with such unchangeable forces (indestructible qualities) are called in science Elements. Now, if we regard the Universe as broken up into elements with constant qualities, the only possible changes in such a system are spatial (*i.e.*, dependent on position), *i.e.*, are motions; the external relations through which the operation of forces is modified, can only be spatial; and, finally, forces can only be forces producing movement, dependent, so far as their action is concerned, on relations of space alone." Helmholtz, *Erhaltung der Kraft*, pp. 2-4.

[8] This is put strongly, perhaps too strongly, by Whewell. "Such principles as I have mentioned—that material substance cannot be produced or destroyed, that the cause is measured by the effect, that reaction is equal and opposite to action, are not the results of experience, nor can be. . . . If the axiom of substance were not true, and were not assumed, we could not have such a science as Chemistry, that is, we could have no knowledge at all respecting the changes of form of substances" (*Phil. of Discovery*, 349). On the other hand, Professor Huxley (*Hume*, p. 52) speaks with contempt of "pure metaphysicians," who "assert that scientific observation is impossible unless such truths are already known or implied; which, to those who are not 'pure metaphysicians,' seems very much as if one should say that the fall of a stone cannot be observed unless the law of gravitation is already in the mind of the observer." Professor Huxley, however, seems to overlook the distinction between the conditions of experience as such and the special laws of this or that portion of experience (see Kant, *Prolegomena*, § 17), and he would undoubtedly find it hard to show that observation of a fact from which any scientific inference could be

drawn is possible without involving the general principle on which all scientific observation is based. Probably he means by the observation of the "fall of a stone" the consciousness of a particular series of sensations; he would find it equally hard to show how I can be conscious of a series *as such* apart from the general condition which enables me to determine existence in time at all. Professor Huxley evidently thinks, however, that the human mind can be conscious of a single sensation, *i.e.* can determine its own existence as sentient, *absolutely*, or apart from the element of difference (see *Hume*, pp. 55, 68). This is to outgo Hume himself, and is, after all, mere words. The single sensation, say *red*, which Mr. Huxley is contemplating, is the sensation as known to him in actual connected experience. What qualities it may have, regarded apart from such experience, neither Mr. Huxley nor any other "geographer" of the human mind is likely to inform us.

[9] By *cause* in its modern scientific acceptation, I refer specially to the doctrine of the conservation and transformation of energy, which has for the first time allowed us to state the scientific law of causation in an accurate form. Valuable as is this doctrine for practical purposes, much remains to be done in the way of clearing up the presuppositions on which it rests. It is probably incapable of statement apart from that conception of the physical universe, which we shall see is the real counterpart of the category of Reciprocity, the conception of a system of substances or ultimate subjects of motion, mutually determining, and through their reciprocal determinations forming *one* system. So far as I have been able to discover, all expressions for the laws of energy involve, more or less

explicitly, this conception (see Stewart, *Conservation of Energy*, (Inter. Sc. Series); Tait, *Recent Advances in Physical Science*, sects. i.-iii., and *Thermo-dynamics*, § 97.; Helmholtz (*Erhaltung der Kraft*, and *Pop. Scientific Lectures*, pp. 317-362).

[10] The following sentences from Geulincx, who pushed the Cartesian opposition of Thought and Extension to its logical consequence, are extremely curious when considered in connection with much modern speculation on the same subject: "Igitur in mundo nil quicquam agimus, spectamus eum duntaxat, verum illud spectare rursus admirabili modo contingit, nam mundus non potest se ipsum ut spectetur adhibere, nec speciem suam nobis ingerere, est in se ipso invisibilis. Quemadmodum non operamur in id, quod extra nos est, ita, quod extra est, non operatur in nos" (*Ethica*, p. 122). "Nec motus sequitur in membris meis voluntatem meam, sed voluntatem meam comitatur" (p. 124).

Since these lectures were given an extremely able examination of certain modern theories on this subject has been published.—*Modern Realism Examined*, by the late Prof. J. M. Herbert, 1879.

[11] The first and most important of the scientific writers who called attention to Kant as having greatest significance for modern thought was Helmholtz. In various addresses, but more especially in his great work *Physiologische Optik*, 1867, he brought forward the Kantian philosophy as supplying a groundwork both for scientific cognition as a whole, and for the theory of perception in particular. It is to be said, however, that Helmholtz, like many other scientific writers, seems to owe his knowledge of Kant to Schopen-

hauer. His doctrine of Cause, *e.g.*, is not Kantian, but distinctly belongs to the later writer.

Kantianism is very prominent in Wundt (see *Die physikalischen Axiome*, 1866 ; *Physiologische Psychologie*, 1874 ; and particularly his inaugural addresses of 1874 and 1876). Zöllner (*Ueber die Natur der Kometen*, 1872) deserves mention for the enthusiastic manner in which he has called attention to Kant's merits in physical science. He, too, like Helmholtz, seems to have drawn more from Schopenhauer's Kantianism than from Kant himself.

[12] Zeller, *Vorträge u. Abhandlungen*, II. p. 468.

[13] Zeller, *ut sup.* Cf. pp. 470, 488. See also Helmholtz, *Pop. Sc. Lec.* (E. Trans.), p. 6. "On this hypothesis it seemed competent for the human mind, even without the guidance of external experience, to think over again the thoughts of the Creator, and to re-discover them by its own inner activity."

[14] It is not to be denied that Hegel, and, to an even greater extent, Schelling, erred in their mode of dealing with natural science ; but the supposition that metaphysic, say as conceived by Hegel or Fichte, who may be selected as specimens of "pure metaphysicians," attempts to construct *a priori* the body of physical knowledge, rests only on gross misapprehension, and is rejected in so many words by these authors themselves.—(See Hegel, *Encyclopädie*, § 145 ; and very specially Fichte, *Werke*, II. 333, V. 340.

[15] Cf. Helmholtz, *Pop. Sc. Lect.* p. 5. "Kant's philosophy rested on exactly the same grounds as the physical sciences, as is evident from his own scientific works." For an adverse view with regard to the relation between Kantian-

ism and scientific method, see Hegel, *Encyk,* § 60 (*WW.*, VI. pp. 121-2).

[16] Helmholtz, *Ueber das Sehen des Menschen*, 1855; p. 6.

[17] Kant, *WW.*, I. 563. Cf. *Prolegomena*, §§ 4, 5, 40, 42.

[18] The third part of the *Allgemeine Naturgeschichte und Theorie des Himmels* (*WW.*, VI. 205, sqq.) contains some remarkable utterances on Man. The other works referred to are chiefly *Ueber den Gebrauch teleologischer Principien in der Philosophie* (VI. 355-391); *Muthmaasslicher Anfang der Menschengeschichte* (VII. (1), 363-385); *Idee zu einer allgemeinen Geschichte* (VII. (1), 315-337).

[19] Cf. Schultze, *Kant und Darwin*, 1875; Dieterich, *Kant und Newton*, 1876; *Kant und Rousseau*, 1878; Lasswitz, *Atomistik und Kriticismus*, 1878.

[20] These oppositions, which form the substance or matter of modern reflection, may be thus summarised:—Thought and Being, Mind and Nature, Soul and Body, Freedom and Divine or Natural Law, Natural Inclination and Moral Reason, Mechanism and Teleology. All of them appear in Descartes; they are, indeed, but the specific modes in which the Cartesian reform expresses itself.

[21] We may say that exaggeration of this distinction is the cardinal error of Cartesianism. The subject is there purely negative or critical thought, empty self-assertion as opposed to the fulness and concreteness of the world as known. The Idea of God in Descartes, the Vision of all things in God with Malebranche, and the Infinite Sub-

stance of Spinoza, are but violent efforts to overcome the irreconcilable opposition with which these thinkers started.

[22] Cf. Fichte, *Werke*, I. 281.

[23] Works (ed. 1854), IV. 173.

[24] Huxley, *Selected Essays*, p. 139.

[25] See Lange, *Gesch. d. Materialismus*, II. 3-4.

[26] The pressure of this difficulty, caused by assuming as known to thought a distinction absolutely insoluble by thought, is seen with greatest clearness in Malebranche and Geulincx. The real existence of things is for Malebranche a quite unnecessary addition to the "Intelligible Extension" which we perceive in God. (See *Entretiens sur la Metaphysique*, V. and VI.)

[27] Specially interesting at the present time is that view of metaphysical or psychical Monism which, in various forms, is presented by Noiré, Wundt, Taine, Lewes, S. H. Hodgson, and others.

[28] *Gesch. des Material.* II. 4-5.

[29] As is done, among others, by Zeller. See *Gesch. d. deutsch. Phil.* 426 ; *Vorträge u. Abhandl. 2te. Samm.* 491.

[30] With what is here said may be compared the very thoughtful treatment of *Phenomenalism*, by J. Grote (*Exploratio Philosophica*). The same view lies at the bottom of Ferrier's vigorous polemic against psychology (*Institutes, passim*).

[31] It might easily be shown that the irreconcilable opposition between Thought and Things into which Descartes was led, resulted from the fact that his first transcendental

conception of thought was allowed to fall back into the psychological conception of the concrete individual mind.

[32] *Prolegomena*, § 13, *Anm.* I.

[33] The similarity of Kant's thought and language to that of Hume on the same point is very remarkable. Kant (*Werke* I. 158), "Wie aber etwas aus etwas anderm, aber *nicht* nach der Regel der Identität, fliesse, das ist etwas, welches Ich mir gerne möchte deutlich machen lassen." Hume (*Works*, IV. 39), "We always presume, when we see like sensible qualities that they have like secret powers, and expect that effects similar to those which we have experienced will follow from them. . . . Now, this is a process of the mind or thought, of which I would willingly know the foundation."

[34] *Werke*, XI. i. pp. 25-6.

[35] The extent of Kant's acquaintance with Hume's works is a disputed point, not apparently to be settled with absolute precision. That he knew the *Treatise of Human Nature* seems to me extremely improbable. There is no external evidence in favour of the supposition, and internal evidence is altogether against it. Kant could not have persisted in regarding Hume's sceptical criticism as limited to causality had he read the *Treatise*; nor, in that case, would he have failed to notice Hume's empirical theory of mathematical truths. Throughout, indeed, he assumes that Hume grants to mathematics *a priori*, though analytical, truth; a more thorough study of the *Essays* might have cast some doubt upon this. As to the time at which Kant first came in contact with Hume, that must probably be thrown as far back as the 1755 translation into German of the *Essays*. From the *Notice of his Lectures*, 1765-6

(*WW.*, I. 297), it is evident that Kant was in the habit of using Hume's *Moral Essays* in his ethical prelections, and, if the report of Borowski is to be credited (*Leben Kant's*, p. 170), he must, as early as 1756, have been engaged in the study and criticism of Hume's theory of knowledge. I cannot trace any distinct evidence of Hume's influence before the period already mentioned as that of the formulation of the critical question—1769-72; up to that date Kant's development seems quite intelligible when regarded as his progress from the principles of the Leibnitz-Wolff metaphysics. See on this matter, *pro* and *con*, Paulsen *Entwicklungs-geschichte*, pp. 47, sqq.; and B. Erdmann, Ed. of *Prolegomena; Einleitung*, p. 81, sqq.

[36] Cf. *WW.*, I. 72-3.

[37] The logical principles of the Leibnitzian theory of knowledge are of interest sufficient to repay detailed examination. The only systematic treatment of them (Kvet's *Leibnitz'ens Logik*, 1857) is neither sufficiently full nor thoroughly sound. The fundamental principles follow at once from the conception of knowledge as but the self-evolution of the consciousness of the individual subject or monad. It follows from this (1) that there is no absolute distinction between empirical and *a priori* truths; (2) that the first principles of all truths are contained in the consciousness of the *Monas Monadum*; (3) that all knowledge forms a completely connected and harmonious system; (4.) that the process of discovering truth is Analysis, by which we clear our confused ideas and refer them to first truths; (5) that ultimate truths are identical propositions; empirical truths are those which, from the point of view of the finite mind, cannot be reduced to identities save through an infinite process.—(See *Opera Philosophica*, pp.

208; 80, 620, 717; 719-720; 177, 707, 83, 99.) Thus the system of knowledge consists of data, and consequences from them and contained in them. *Scientia generalis*, or logic in its highest sense, a logic of which the Aristotelian is but a branch, has to investigate fully the methods by which we may pass from data to consequences, or from consequences to data. It falls thus into two parts (I dismiss as unimportant the distinction between Art of Judging and Art of Discovery): I. Synthetic or Combinatorial, II. Analytic. In the first, we can have demonstration; in the second, as the regressus is infinite, only probability. Synthetic logic has therefore to determine the laws of the possible combinations of given data; analytic logic, the degrees of probability with which we can infer the data from which given effects followed. The method of synthetic logic is mathematical, or rather, mathematical reasoning is but a special modification of the general laws of combination of data. The ratiocinative calculus requires for its completeness (*a*) reduction of all notions to simple data, (*b*) exposition of the general rule and special modifications for combining, (*c*) a new algorithm or characteristic notation. The first requisite leads Leibnitz to the doctrine of ultra-quantification; the second to the statement of the general principle of substitution of equivalents; the third is only partially worked out. Details, so far as given, are to be found in the logical tracts (*Opera Phil.*, pp. 81-104). The logic of Probability is only indicated as a desideratum. A historical account of the development of these thoughts, as in Tschirnhausen, Hansch, Ploucquet, Ridiger, and others of the Wolffian school, would be a valuable addition to our histories of logical doctrines. (See for a severe criticism of the arithmetical method in Logic, Hegel, *Logik*, III. 142-3.)

[38] See, among other passages, the admirable sentence (*WW.*, I. 568).

[39] Cf. *Kritik*, p. 182.

[40] Only in this way can I comprehend Kant's expressions in the *Prolegomena* with regard to these judgments. It is quite impossible to suppose that the arbitrary or empirically influenced subsumption of two perceptions (the shining of the sun and the warmth of the stone) under the category is the process by which the categories enter into knowledge. Kant appears to me to be, in this instance, as in the corresponding illustrations under the discussion of the second Analogy, endeavouring to explain, by reference to empirical connections, the nature of objectivity as such. The view taken in the lecture is confirmed by the curious remark that judgments of perception, in which the predicate is my feeling, cannot be raised into judgments of experience (*Proleg.* § 19 *n*). The real error in the matter is the description of these as judgments, without a more explicit statement of the place they occupy in the growth of knowledge. The view of judgment in the *Kritik* (*Analytik*, § 19) is quite sufficient to destroy the idea that the so-called judgments of perception are anything more than subsequent empirical acts, possible only in reference to objectivity already recognised.

[41] Cf. in addition to the official passages in the *Kritik*, *Prolegomena*, and *Logik*, *Werke*, I. pp. 470, 565-6; XI. 1, pp. 97-8.

[42] Schleiermacher, *Dialektik*, § 155, §§ 308-9. Cf. George, *Logik als Wissenschaftslehre*, p. 295.

[43] *Werke*, I. p. 565.

[44] *Kritik d. r. V.* pp. 116-17 *n.* Cf. Fichte, *Werke,* I. 112.

[45] *Kritik d. r. V., Analytik,* §§ 18, 19.

[46] *Kritik d. r. V.* pp. 577-8 *n.*

[47] On the deeper significance of this synthesis, see Fichte, *Werke,* I. 113-14, and Hegel, *Werke,* I. 21 sqq.

[48] Cf. the remarkable note, *Werke,* IV. 39 (*Krit. d. Urtheils-Kraft. Einl.* IX).

[49] See on the point referred to, *Kritik d. r. V.* 579 *n.* Arnoldt (*Kant's Transcendentale Idealität,* pp. 50-51) has some good remarks on Kant's use of the term *intuition.*

[50] See *WW.*, I. 470, and cf. Fichte, *Werke,* I. 186 *n,* 217, 226-7.

[51] See *Werke,* I. 445-46, 469, 502, 508 ; V. 322, 427 ; *Kritik d. r. V.*, 132 *n,* 307 *n,* 567-68. On the matter necessary for perception of space, see specially *Kritik,* 228, and *Werke,* V. 427.

[52] *Kritik,* 579 *n;* and generally, *Kritik,* pp. 115-122, 579-584.

NOTES TO LECTURE II.

[1] *Kritik*, 579 *n.* "Perhaps no psychologist has yet remarked that Imagination is a necessary element in Perception itself. For this faculty has been restricted to mere reproduction, and, in addition, it has been believed that the senses not only convey impressions but also unite them and produce images of objects, for which, however, without doubt, there is something more required than receptivity for impressions, *i.e.* a function of their synthesis." This remark is historically inaccurate, but is all-important for Kant's own theory. Cf. *Werke*, I. 502, 508.

[2] It is of interest to compare with Kant's view the most elaborate psychological treatments of Perception, those of Berkeley and Mill. The function of Imagination in sense-perception is recognised, though not with sufficient clearness, by the former, and the relation between the presented and represented elements in perception is the crucial difficulty in his theory, and in the similar view of Mr. Mill. It will be found to differ from Kant in two points mainly—(1.) The transcendental rule of Imagination, that which Kant calls *Affinity*, is left without recognition; (2.) The represented elements bear only the character of parts in the construction of an intuition, whereas Kant points distinctly to the representation of sense facts determined in time. The occurrence of sensations, which is suggested, and the permanent laws of their

occurrence, are inconceivable apart from the objective order of events determined in time. The "possibility of sensation" is truly equivalent to the possibility of experiencing a sensation. This objective reference, or reference to the order of experience, is left unexplained by Mill, and is thrown by Berkeley into the divine mind, which guarantees subjective associations.

[3] Not, be it observed, "forms of synthetic unity *of* Time itself." The difference is of importance in view of recent discussions. Kant holds that time, like space, is only known through experience in it; consequently the *schemata* are not modes *of* time, but modes of synthetic unity of the possible manifold *in* time.

[4] *Kritik*, 133 *n.* Cf. *Kritik*, 579. "The unity of Apperception in relation to the synthesis of Imagination is the understanding." For deeper apprehension of the nature and importance of productive Imagination in the Kantian theory of Perception, see Fichte, *Werke*, I. 217, 226-7; Hegel, *Phil. Abhandl.*, 25-7.

[5] The psychological side of the *Deduction* is given in greatest detail in the first edition of the *Kritik* (see. pp. 567-585). The essence, however, is to be found in the second edition, § 24, and specially § 26 (pp. 126-9, 131-4). An accurate summary is given by Hölder (*op. cit.* 35-58), who rightly places in the foreground the function of imagination.

[6] Cf. *Kritik*, 134, 576; *Prolegomena*, §§ 16, 17.

[7] In addition to the general discussion in the second edition of the *Kritik* (specially §§ 17, 19, 21), the relative

remarks in the first edition should be kept in view (see particularly *Kr.*, p. 572-3, and the important *note*, p. 577-8.

[8] Cf. *Kritik*, 215, 219, 581.

[9] One of the clearest expositions of *Schematism* to be found in Kant is given in his letter to Tieftrunk, *Werke*, XI. 1, 184-7. That the mediating element between notion and intuition, or rather between the Ego and the particular of sense, is the function of synthesis, which, on the one hand, is conditioned by the pure generality necessary to consciousness as such, and on the other hand, by the special nature of intuition, is more firmly expressed here than in the relative section of the *Kritik*, pp. 140-6. It is certainly true that, for the production of the *schemata*, the pure forms of perception are requisite, but it must be noted that the schemata are not modes *of* these pure perceptions but modes of synthetic unity in them. The most general contents of time, not time itself, are the basis of the schemata. This point is much misconceived in ordinary histories of philosophy, *e.g.*, Zeller, *Gesch. d. deuts. Phil.*, 431 ; Schwegler, *Handbook* (*E. T.*), 222.

[10] See *Werke*, XI. 1. 55-57. Cf. on the point in debate between Maimon and Kant, the relative remarks of Fichte, *Werke*, I. 387-8.

[11] I refer specially to the discussion under the 2d Analogy (*Kritik*, pp. 173-187). The briefer notices, *K.* 133, 207, 213, 430-1, 483 *n*, 508, 521, are much more satisfactory and to the point. Cf. *Kr. d. prak.* V. 92-94.

[12] Cf. *Kritik*, 211, 213.

[13] Cf. specially *Kritik*, pp. 191, 180-1.

[14] *Kritik*, 191-2. Cf. *Prolegomena*, *WW*. III. 87-8. The necessary unity of experience points to a higher view than that which Kant is here contemplating, though it appears at a later stage, when the transition is made to the theory of Reason, or Metaphysic. The idea indicated by Kant is the groundwork for a doctrine of cause, which has been well expressed by Sophie Germain: "Our intellectual tendency to seek the causes of every object that attracts our attention appears to me to indicate that we do not perceive the object in its entirety. It presents itself to us with a character of incompleteness; we ask what is the unity to which it belongs. We see it as a part; we desire to know the whole to which this part belongs" (*Œuvres Philosophiques*, p. 133.) It is not, however, sufficient to say that the object *presents* a fractional character; its incompleteness can only appear on reflective comparison of experience with the rational idea of unity.

[15] *Kritik*, pp. 207-8. Cf. p. 605.

[16] See *Prolegomena*, *WW*. III. p. 72.

[17] See for this misunderstanding of Kant, Schopenhauer *Vierfache Wurzel*. . . § 23.

[18] *Kritik*, 176, 133. Cf. with *Prolegomena*, § 30, the passage in *Kritik*, 508.

[19] *Kritik*, p. 180.

[20] Those who, like Schopenhauer, think that Kant is deducing his proof of Causality from special kinds of sequence, fail to give due prominence to that which is above all things insisted on by Kant, viz. empirical contingency. Kant, so far as the empirical character of events is concerned, would

express himself very much as Hume did. Cf. what is said of *Analogy* in general, *Kritik*, 167-8.

In an elaborate article on the *Philosophy of Causality* (*Princeton Review*, Jan. 1879, pp. 178-210), Dr. Hutchison Stirling has re-stated with great fulness and force the objections previously taken by him (*Fort. Review*, July 1872) to Kant's proof of the 2d Analogy. To enter on all the points raised in this article would demand longer space than can here be given, and would be unnecessary after the discussion of schematism already given in the text. Two special arguments, however, go so directly to the heart of the matter that it is incumbent on all Kantian students to consider their position with regard to them. Dr. Stirling contends *first*, "that any time-multiple correspondent to the multiple of Judgment, the relation of antecedent and consequent, is not to be found;" and *second*, "that, even on Kant's own terms, the multiple of special sense *already* possesses necessity; nay, that on Kant's own terms that multiple already *must* possess necessity" (*Pr. Rev.*, 202. Cf. on the second point, *Fort. Rev.*, *ut cit.*, p. 424).

With regard to the first point, I find it difficult to reconcile Dr. Stirling's general account of the time-multiple or schema (*Pr. Rev.* 203) with Kant himself. Dr. Stirling, *e.g.*, regards permanence *of* time as being the schema for the category substance, whereas, so far as I can judge, Kant's teaching is to the effect that the said schema is the permanent *in* time. The difference is one of considerable importance, for to me Kant's reasoning seems unintelligible unless we suppose that he is considering the conditions under which time-determination is possible. His words are quite emphatic. Time itself is not a perception, and any determination in its regard must be given by the thought relations of possible content of time. With regard either to time or its content, however, Dr. Stirling can find no multiple of imagination corresponding to antecedence and consequence (pp. 204-5). In time itself there is merely succession, no rule; and if we consider that the contents of time are successive *realia*, real facts of sense-intuition, we see at once that no one of them can be conceived as giving rise necessarily to the other. Each *is*, but *is* only as a fact, as a degree of sensation, without causal reference. Both arguments would be admitted by Kant, but neither refers directly to the problem of causation. Dr. Stirling does not allow sufficient weight to Kant's distinction between *à priori* determination of the elements necessary to an intuition, and *à priori* determination of the conditions of *existence*. With absolute mathematical certainty we can say that every element of real experience must have degree, *i.e.*, consciousness must be filled to a certain extent. From the conception of this filling-in nothing follows; but if I ask, How can real intuitions, so determined, be matters of experience at all? a new element appears. To be cognised as existing, they must be related in time, for time is the universal form of all consciousness. The conditions of existence will consequently be the conditions of synthesis in time. The third element in the *Analogies* which Dr. Stirling seems to overlook, is this possibility of experience. A fact of experience to be known at all must be known not only as a *quale* or *reale* of sense, but as determined in time. There is no question as to the category of quantity acting *now*, and the category of causality *then*. We can certainly sever our consideration of quantitative relations from reality, but to do so is, in Kant's own words, " to amuse ourselves with cobwebs of the brain" (*Kr.* 152). In experience all parts are *real quantities* determined as to their existence (*Daseyn*) in time. The time-multiple in question, then, is not to be sought for in the *realia* themselves, nor in time itself, but in that which renders possible experience of change in the *realia*, and this, as has been pointed out in the text, is the schema of determined or necessary sequence. The *prior*, further, is not any definite *a* which is already in experience, but simply the representation of *realia*, which being given, the perceived change is determined as to its being in time. I differ from Dr. Stirling as to the presence of both cause and effect in Kant's examples of causal nexus (See *Pr. Rev.*, pp. 198-9). Dr. Stirling's second argument is that the sense-multiple, by which I understand him to mean a definite *a* and *b* in experience, must be subjectively felt as irreversible, necessary, before it can be subsumed under the category of causality. "It is not," he says, "every multiple of special sense that possesses, so to speak, the *cue* of causality" (p. 205. Cf. *Fortnightly Rev. ut cit.*, p. 424). On this I can only add to what has been, from other motives, advanced in the text, the following two remarks. First, the multiple which is in the case in question, is not a definite *a* and *b*, and the irreversibility applies not to certain sequences, which, on other grounds, we may call cause and effect, but to the sequence of perceived parts in real experience. The multiple, in all cases of causality, is change *plus* the representation of preceding real contents of sense. Secondly, to suppose that only some multiples of special sense afford matter for the causal judgment is to do violence to Kant's own words. *All* events in time are subject to that judgment. There is no conjuring of causal nexus out of contingent sequence, no reading of necessity into this or that special connection of phenomena. The particular preceding *a*, which being given, *b* follows, is the problem of scientific research. That Kant should be understood to say that we *a priori* know that this and that special modification of sense are related as cause and effect, is to me altogether incomprehensible.

Dr. Stirling's remarks on the subjective character of Kant's mechanism of perception seem to be justified, not on the special grounds he has advanced, but on the ground of the individualist phraseology which Kant is incessantly employing. Nowhere is this so clear as in the *Transcendental Æsthetic*, but in fairness to Kant, it should be remembered that his proof is more general than the expression he has given it. Space and Time are not merely subjective spectra by means of which the individual intelligence conjures order into subjective rhapsody of sense facts, but conditions under which matter, the external as such, is possible for any intelligence. This is the real burden of his argument, despite the unfortunately psychological aspect which in Kant it confessedly wears. So with Causality, which is not to be regarded as a subjective addition to matter already given, but as the condition under which sequence or change is possible for intelligence as such.

[21] *Kritik*, 207 ; 228 (Cf. *WW*. V. 403-6) ; 173.

[22] The Cartesian idealism, therefore, though Kant's argument is, on another side, valid against the individualism of Berkeley. Erdmann (*Grundriss d. Ges. d. Phil.* 3d ed. II. 322) remarks that Fichte had pointed out that the idealism criticised was not that of Berkeley.

[23] See specially the IV. Paralogism as in 1st edition; *Kritik*, pp. 597-619. The Refutation of Idealism given there (pp. 605-6) is amplified in 2d edition (pp. 197-200, and *Vorrede*, pp. 29-30 *n*), but not essentially altered. The impossibility of cognising *a priori* the content of perception seems to Kant sufficient proof of its *reality* (*WW.* V. 321). Cf. I. 509, and *Kritik*, 164-5, 602.

[24] Kant perfectly recognises this with respect to the pure unity of consciousness; see *Kritik*, p. 617.

[25] *Kritik*, p. 207. Cf. p. 208.

[26] See the remarkable passage, *Werke*, V. 405-6.

[27] See *Werke*, I. 522, 550, 606; *Kritik*, 205 *sqq.*, 605; *Werke*, V. 310.

[28] See *Critique of IV. Paralogism*, as in 1st edition.

[29] It would be interesting to point out how this mode of viewing the inductive methods enables us to secure for them their due place in a system of logic. The usual sharp distinction between deduction and induction leads to grave error and confusion of thought. What is usually called induction is not in kind distinct from reasoning in general, but is only the collection and examination of facts under the guidance of general principle. Berkeley must be credited with a sound conception of the nature and significance of inductive method (see Fraser, *Life and Works of Berkeley*, p. 407 *n*), though his recognition of the ideal forms is not sufficiently explicit.

[30] *Prolegomena*, § 57 (*WW.* III. 127-8). "Reason finds for itself no satisfaction in all the notions and laws of understanding which are sufficient for its service in ex-

perience, *i.e.* in the world of the senses; for ever-recurring problems deprive it of all hope of a completed solution. The transcendental Ideas, which have as their aim this very completeness, are such problems of Reason. Now it (*i.e.* Reason) sees clearly that in the world of the senses this completeness cannot be given; just as little can it be given in all these notions which merely serve for comprehension of that world—Space, Time, and all that has been brought forward under the name of pure notions of the Understanding. The world of sense is nothing but a chain of phenomena (*Erscheinungen*) connected according to general laws; it has, therefore, no subsistence by itself; it is distinctly not the thing-in-itself, and therefore has of necessity reference to that which contains the ground of the phenomenal, to essences, which cannot be known merely as phenomena, but as things-in-themselves. Through knowledge of these only can Reason hope to find satisfaction for its desire of completeness in the progress from the conditioned to its conditions."

[31] Cf. *Kritik*, pp. 437, 455. Cf. pp. 342-3, 548-9. Cf. also *Proleg*, § 44 (*WW.* III. 100).

[32] *Werke*, I. 429 *n.*

[33] Jacobi, *Werke*, II. 304. Cf. Harms, *Phil. seit Kant*, 186.

[34] On Things-in-themselves as ground of phenomena, see *Werke*, I. 427, 429-30, 436; IV. 216; XI. 1, 187. The most important passages used in the text are *Kritik*, pp. 220-2, 240-1.

On the applicability of the categories to Things-in-themselves, see *Werke*, IV. 392-3; *Kritik d. prak. Vern.*, 245-6.

Riehl (*Philos. Kriticismus*, I. 439, *sqq.*) has the curious idea of a distinction between Noumenon and Thing-in-itself. See against this *Werke*, I. 427, and cf. *Kritik*, 218 *n.*

[35] On dialectic as negative proof, see *Werke*, I. 527-8.

[36] On Reason as the origin of the conception of Limit, see *Grundleg d. Met. d. Sitten* (*ed.* 1791), 107-8. The use of *Verstandeswelt*, throughout the ethical works, to denote the intelligible system is somewhat confusing.

The principle that consciousness of a limit is only through reference to that which is above the limit plays a most important part in Kant. See *Werke*, IV. 292, and specially 296. Cf. also *Proleg*, § 59 (*WW*. III. 136-8).

[37] See specially *Kritik d. Urtheils Kr.*, § 76. Thiele's work, *Kant's Intellectuelle Anschauung* contains much valuable matter on this difficult point.

[38] See on Spinoza's view of the Ego as determined through the category of Mode, Fichte, *Werke*, I. 100. Cf. I. 155.

NOTES TO LECTURE III.

[1] See *Kritik*, p. 437. "If we survey the whole extent of our knowledge through Understanding, we discover that what Reason specifically directs in its regard and strives to bring about, is systematisation of knowledge—*i.e.* the connection of the whole according to one principle. This rational unity always presupposes an Idea—that, namely, of the form of a totality of cognition, which precedes the determined cognition of the parts, and contains the conditions which determine *a priori* the place of each part and its relations to all the others." Cf. pp. 337, 548-9, and *Proleg.* § 56.

[2] Cf. *Proleg.* § 40 (*WW.*, III. p. 94.) On the difference between scientific incomprehensibilities and metaphysical problems, see *Proleg.* § 56 (*WW.* III. pp. 121-2), § 57 (*WW.* III. pp. 126-7) ; *Kritik*, p. 337.

[3] *Kritik*, p. 455. Cf. *Kr.* p. 342.

[4] One of the clearest and briefest expositions of these antinomies, their origin, and solution, is to be found in Kant's Essay, *Fortschritte der Metaphysik seit Leibnitz und Wolf* (*Werke*, I. 524-9). The whole Essay is of great importance, as giving Kant's mature views on many points

of interest in the *Kritik.* On the origin of Antinomy, see Fichte, *Werke*, I. 245 ; Hegel, *Phil. Abhandl.* 33-35.

[5] *Kritik*, p. 339.

[6] *Kritik*, 450-1 ; cf. p. 418.

[7] *Kritik*, pp. 371-2.

[8] See *Werke*, I. 530 ; cf. *Kritik*, p. 372.

[9] See *Kritik*, p. 373. (" If phenomena are things-in-themselves, Freedom cannot be saved. In such a case Nature is the complete and adequate cause of every event, and the condition of any event is always contained in the mere series of phenomena which, with its results, is necessitated according to natural law. But, on the other hand, if phenomena are not taken to be more than they really are—*i.e.*, are not taken to be things-in-themselves, but mere *Vorstellungen*, connected according to empirical laws, then they must themselves have grounds which are not phenomena.") Cf. also *Kritik*, p. 390. From the latter passage, with which may be compared *note* 30 (*Lecture* II.), it is clear that Kant's argument turns upon the limited, conditioned character attaching to the portions of experience. It is unfortunate that he also introduces the mode of reasoning suitable to psychological idealism.

On the impossibility of Freedom, if the categories of understanding applied throughout to man and his actions, there is a remarkable passage in the *Kritik der praktischen Vernunft*, pp. 180-3, in which occurs the expression, " conscious automata," familiar in recent discussions.

[10] Kant has quite sufficiently explained what has so frequently been regarded as a glaring inconsistency in his theory, the use of the notion ' cause,' in reference to the

supersensible or noumenal world. See *Kritik der Urtheilskraft*, p. 37 (*Werke*, IV.), and pp. 392-4 (*ibid.*) Cf. also *Kritik der prak. Vern.* pp. 94-6, 245-6 ; *Prolegomena*, §§ 57, 58.

[11] On the notion of contingency more will afterwards be said. A very comprehensive discussion of the question is contained in Stadler, *Kant's Teleologie*, pp. 60-67. See also Cohen, *Kant's Theorie der Erfahrung*, pp. 233-4.

[12] The discussion under the third Antinomy is in principle the same as that which appears in the Critique of Judgment. It is the first stage of the fuller determination to be given to the supersensible world. See Hegel, *Logik*, III. 207-210.

[13] As to *first*, see *Kritik*, p. 491 ; as to *second*, see *Kr. d. Urth.* pp. 24-5 (*Werke*, IV.)

[14] The category of Reciprocity which is here discussed is that of greatest importance in physical science, and is, moreover, the notion by which transition may most readily be made to metaphysic. It has been already pointed out (*note* 9 to Lecture I.) that the chief modern generalisation of physical science rests upon this category ; and it may here be added that upon the same idea depend entirely many of the most important discussions in recent philosophical literature—*e.g.* that concerning the possibility of plurality of causes, the questions involved in so-called 'Automatism,' and generally the deterministic view which underlies much of the historical method. For scientific expression of the notion, reference may be made to Du Bois-Reymond (*Grenzen des Naturerkennens*, pp. 5-7), who follows Laplace. It is to be observed that, in his very able

statement of the limits to application of the notion, we have simply a supposed insuperable difficulty placed alongside of a principle which is regarded as unconditionally true. No effort is made to test the notion itself, to discover why and how *we* come to apply it, and consequently how its limits are to be explained. No exposition, however, of the nature and results of the category has ever surpassed, or even equalled, that given by Fichte, in the first book of his *Bestimmung des Menschen.* A few sentences may be quoted from that work, to show how fully the import and consequences of the principle had been grasped by him :—"In every moment of her duration Nature is one connected whole ; in every moment each part must be what it is, because all the others are what they are. You could not remove a single grain of sand from its place without thereby, though probably imperceptibly to you, altering something throughout all parts of the immeasurable whole. But every moment of this duration is determined by all past moments, and will determine all future moments. You cannot conceive even the position of a grain of sand other than it is in the present, without being compelled to conceive the whole indefinite past as having been other than it has been, and the whole indefinite future other than it will be" (*Werke,* II. 178). "That my states of existence have been accompanied by consciousness, and that some of them—thoughts, resolutions, and the like—appear to be nothing but modes of mere consciousness, need cause me no perplexity in my reasoning. . . . Thought exists, and exists absolutely, just as the formative power of nature exerts and exists absolutely." "A thought arises in me simply, and just as simply the corresponding real form, and the movement which corresponds to both. I am not what I am, because I so think or so will; nor do I so think or so will because I am; but I am and think, both absolutely; but both harmonise from some higher ground." "I am what I am because in this conjuncture of the great whole of Nature only such, and no other, was possible; and a spirit who could look through the secrets of nature would, from knowing one single man, be able distinctly to declare what men had formerly existed and what men would exist at any future moment; in *one* individual he would cognise *all* real individuals. My connection, then, with the whole of Nature is that which determines what I have been, am, and shall be, and the same spirit would be able, from any possible moment of my existence, to discover infallibly what I had been and what I was to become."—(*Ibid.* 179-80, 181, 182-3). From these principles Fichte, with the utmost clearness and consistency, deduces the consequences as regards soul and body, nature and will, which have been made familiar to us in recent discussions on Automatism. It is worth while noting that rigid adherence to the thought of reciprocity is destructive to that of causality. For under this notion, taken in its full abstraction, change in the universe becomes inconceivable. We cannot with any consistency think the states of the universe as cause and effect, even without taking into account that, in endeavouring to do so, we must inevitably defeat our own aim.

As was said, this idea of reciprocity is perhaps that by which the scientific or popular consciousness most easily becomes metaphysical. But in pure metaphysic the notion occupies a remarkable historic position. In Spinoza, and, to a certain extent, in the Cartesian demand for a completed whole of cognition, reciprocity is the one key to explanation (see *e.g.* Spinoza, *Eth.* II. Prop. 43, 44; and for an admirable exposition of his theory of knowledge, Camerer, *Die Lehre Spinoza's*, pp. 67-112). In the *Beweise für das Daseyn Gottes* (specially pp. 505-6, 510-17, *Werke*, XII.), Hegel comments upon this Spinozistic notion.

The poetic expression of the same thought is familiar to us in Tennyson's little poem, "Flower in the crannied wall."

[15] See *Kritik*, pp. 452-3. "Finally, in reference to theology, we must treat all that which may never be given save in the connection of possible experience as if this composed an absolute unity, though throughout dependent and always conditioned within the world of sense, but at the same time as if the complex of all phenomena (the world of sense itself) had a single supreme and all-sufficient ground beyond its sphere, *i.e.* to say a self-existent, original, and creative understanding, in reference to which we must regulate all empirical employment of *our* reason when pushed to its utmost limits, as if objects themselves originated from such a prototype of all Reason." In other words, our notion of reciprocity, when carefully tested, manifests its inadequacy, and must be supplemented by the idea of a ground of things external to the system itself. Such ground is the supposed intuitive understanding.

[16] See *Werke*, I. 543-4.

[17] The force of Kant's criticism of the arguments for the existence of God has been as much under-estimated, on the one hand, as exaggerated on the other. The really important element is the closeness of scrutiny to which the notions of understanding as media of proof are subjected. Kant is quite successful in showing that by the notion of cause, or of necessary existence, we cannot pass beyond experience itself. This result of his criticism

seems to me to have been somewhat misapprehended in the most able recent work on the subject, Professor Flint's *Theism* (1877). Professor Flint reprobates the idea of an infinite regress as the necessary result of applying the notion of cause, holds that the merely abstract employment of the principle of causality, as in Kant, is childish, but, curiously enough, hesitates when he comes to deal with the inference of a first uncaused cause (see p. 121), and is willing to allow that this does not result from the principle of causality alone. Surely this is quite Kantian, and surely Kant is warranted in asserting that the notion of cause only enables us to "spell experience" to connect events which form parts of our experience, and consequently, that by this notion, in its scientific form, we cannot pass beyond experience. He is quite aware of what Professor Flint (pp. 118-9) calls the "concrete" use of the principle of causality; it appears in him as the principle of teleological judgment, and he is surely correct in saying that the notion here employed differs widely both in import and validity from that of cause.

I quite agree with what Professor Flint says (p. 284) as to the narrowness inseparable from Kant's doctrine of knowledge, but that narrowness is not to be overcome by simply levelling all distinctions between the notions of understanding and the ideas of reason. Nor do I think Professor Flint quite justified in his strictures on Kant's critique of the ontological argument (pp. 282-3). To annul the subject of a judgment, says Professor Flint, implies the idea of the subject, and from the idea follows, in the case of a triangle, the equality of its angles to two right angles, in the case of God, his necessary existence. Certainly, would be the reply, but this omits the one point in dispute. You may draw what conclusion you can from the idea of a triangle ; the question is whether the idea is of such a nature that its object can be given in experience. If so, then, without doubt, all that can be deduced from the idea must be accepted as objectively valid. The validity, be it observed, does not depend on the strength or accuracy of the deduction, but on the possibility of realising in experience the object corresponding to the idea. Whatever, therefore, be the narrowness of Kant's conception of experience, the same argument cannot be applied to an idea which may be schematised in experience and an idea to which no *object* can be found. It may be permitted to quote here Kant's own remark, " A notion is always possible, if it is not self-contradictory. This is the logical criterion of possibility, distinguishing the object of the notion from the *nihil negativum.* But the notion may none the less be quite empty, unless the objective reality of the synthesis whereby it is generated has been specially demonstrated ; and such demonstration rests always on principles of possible experience, not on the fundamental proposition of analysis (the law of contradiction)." *Kritik*, p. 408 *n.*

A very fine statement and review of the arguments for the existence of God is given by Daub (*Vorlesungen*, II. 541-513). Romang's treatment (*Natürliche Religionslehre*, 194-226) is also very instructive. Hegel, throughout the *Logik*, and in the special lectures on the subject, submits the proofs and Kant's view of them to thorough criticism (see particularly *Werke*, XII. 436-62).

[18] See the special note, *Werke*, I. 569-70, cf. I. 544.

[19] Kant's cautious statement on this point has also met

with less than justice from his critics. It has been made a continual reproach to him that in the *Critique of Practical Reason*, he has, on the ground of the moral law, reintroduced the idea of God as indicating a reality, while his theory of knowledge compels him to say that such reality cannot be known. Such teaching may doubtless be misconceived. Thus, to take but one instance, Professor Flint, in a special note (*Theism*, pp. 397-9), says, "His reply" (*i.e.* to the objection that possibly the practical is as weak as the speculative foundation) "amounted merely to re-affirming that we are under the necessity of associating the idea of a Supreme Being with the moral law, and then qualifying the statement by the admission that we can know, however, nothing about that Being; that as soon as we try to know anything about him we make a speculative, not a practical, use of reason, and fall back into the realm of sophistry and illusion from which the Critical Philosophy was designed to deliver us." Now this is hardly Kant's argument, and the criticism does not really affect Kant's position. What Kant says is, in substance, that the moral law is the very essence of Reason, that the *existence* of a Supreme, Intelligent Will, *i.e.* of God, is necessarily bound up with this law, and that, consequently, the existence of God is given with as much certainty as Reason itself. But we can determine neither the moral law nor the nature and attributes of God by the forms of scientific cognition, which are in their regard entirely inadequate. The confused observations (*Kritik d. Urtheilskraft*, p. 353), where the reading of the second edition must be taken, in no way militate against this view. Professor Flint's remark "that the ideas of freedom and responsibility might be as delusive when supposed to assure us of reality as those of causation and design," I do not exactly understand. The idea of cause has nothing delusive in it; nor can it, without some stretch of language, be said to assure us in any case of reality. After all, does Kant's view differ fundamentally from the ordinary theistic teaching that God is incomprehensible, and therefore not adequately cognised through merely relative notions? (See *Theism*, pp. 297-8). When the arguments founded on cause, design, etc., are tested, we generally find the frank admission that *per se* they are not entirely adequate, and surely the ground of this inadequacy is where Kant has placed it.

[20] The discussion here in particular, and generally in the *Dialektik*, is most important as regards the full significance of the categories of themselves. The value of the critique of the Ideas in this respect is briefly hinted at by Hegel *Logik*, I. p. 51.

[21] *Kritik*, p. 440, cf. *Prolegomena*, § 44 (*Werke*, III. 100) "Yet there must be harmony between that which belongs to the nature of Reason and to that of the Understanding, and the former must contribute to the perfection of the latter, and cannot possibly confuse it." A more cautious statement is given at the close of § 60 in the same work (*WW.*, III. 141).

[22] See generally the appendix to the Transcendental Dialectic (*Kritik*, 435-50). In a complete exposition it would be requisite and interesting to point out the special nature of this regulative employment of the Ideas, to distinguish the several functions of judgment as determining, reflective, and practical, and to note the corresponding places assigned to *schema, symbol,* and *type.* On the latter point see *Werke*, I. 591, 513; IV. 231, and *Kritik d. prak. Ver.* p. 122. Clearly the *analogon of a schema* referred

to in the *Kritik d. rein. Ver.* p. 448, is what Kant later designated *symbol.*

[23] *Krit. d. Urtheil.* p. 23 (*WW.*, IV.), cf. *Werke*, I. 590 *sqq.*

[24] *Werke*, IV. 22, 24-5.

[25] *Kritik*, p. 491.

[26] "Judgment in general is the faculty of thinking the particular as contained under the universal. If the universal (the Rule, Principle, Law) is given, then the judgment which subsumes the particular thereunder, is *determining.* But if only the particular is given, for which the universal is to be found, then judgment is merely *reflective*" (*Werke*, IV. 17), cf. *WW.*, I. 589.

[27] *Kritik*, 438-46 cf. *Kritik d. Urtheilskr.* 20-21. It is evident, and in a later note special passages will be adduced in proof, that what Kant is here dealing with in the *Critique of Pure Reason* is the substance of the critique of teleological judgment. The *hypothetical use of Reason* (*Kr.* 438) is the reflective judgment of the later *Kritik d. Urtheilskraft.*

[28] *Kritik*, 442. On this is grounded the worth of these principles for cognition, *i.e.* their transcendental character.

[29] For a most interesting exposition of these laws, see pp. 653-70 of Professor Caird's *Phil. of Kant.* On the whole subject there is a very valuable chapter in Cohen's *Kant's Begründung der Ethik*, pp. 73-99.

[30] The Ideas, then, do not indicate *objects.* Theoretically they point only to the definite directions in which rational completeness of experience is demanded. But

from the fact that Reason has no other than finite and relative categories whereby to think this completeness, and that such categories always indicate connection between *objects*, we represent to ourselves the supreme unities of experience as supersensible things. "Pure Reason does not in its Ideas point to particular objects, which lie beyond the field of experience, but only requires completeness of the use of the understanding in the system of experience. But this completeness can be a completeness of principles only, not of intuitions and of objects. In order, however, to represent the Ideas to itself determinately, Reason conceives them as the cognition of an object—a cognition as regards those rules completely determined, though the object is only an Idea—in order to bring cognition through understanding as near as possible to the completeness indicated by that Idea" (*Proleg.* § 44, p. 100). "We must therefore conceive an immaterial being, an intelligible world, and a supreme Being (mere *Noumena*), since in these only, as things-in-themselves, reason finds that completeness and satisfaction which it can never hope for in the derivation of phenomena from their homogeneous grounds, and since these really refer to something different from themselves (consequently quite heterogeneous), for phenomena always presuppose a thing-in-itself, and therefore indicate it, whether we may know more of it or not" (*Ibid.* § 57, p. 129).

These remarks are important, for even if we hesitate with regard to the Kantian restriction of cognition through finite notions to possible sense-intuition, we must accept the doctrine that the content of these categories is of such a nature that by their means the unconditioned cannot possibly be determined. The homogeneity to which Kant refers precludes us from employing the categories of substance or cause to determine the nature and existence of the soul or the Supreme Being. The notion of cause, it may be specially remarked, must be altered in significance when we infer by its means the existence of a Supreme Being. That this is so, seems to me sufficiently indicated by the fact that those who employ the notion in the Theistic argument are compelled to deny the existence of causes in the world of sense. The well-known doctrine, that so-called secondary causes are not in truth causes at all, a doctrine familiar in Malebranche and Berkeley, is merely the recognition of this fundamental difficulty. (See Professor Flint's *Theism*, p. 126, "In fact, as we have already seen, a secondary cause is not strictly a cause.")

[31] *Kritik*, p. 461. On the same point the passage, pp. 464-5, should be consulted.

[32] See *Kritik der Urtheilskraft*, pp. 18-19 (*Werke*, IV.); and *Werke*, I. 589-90.

[33] *Kritik d. Urtheilskr.* § 76. Cf. *Ibid.* p. 282.

[34] "Reciprocity, indeed, is the name that not inaptly describes the peculiar view with which Kant followed up the suggestions of Hume. Kant, for example, referred all to the reciprocity of Noumena. What constituted Knowledge was Phenomena derived from the reciprocal action of the Noumenon without and the Noumenon within." Stirling, *Secret of Hegel*, I. 297. Cf. *Ibid.* p. 303.

[35] See on this point Hegel, *Logik*, III. 207-210.

[36] As already remarked (*sup.* note 30), it is of importance in Kant's view that the Ideas do not indicate objects.

For it follows therefrom, in addition to what has been already pointed out, that the supersensible cannot be cognised as in immediate relation to the things of experience. We cannot cognise, *e.g.*, God as the cause of the universe. Were this possible, then God would be simply one out of many objects of experience—an evident contradiction. But though we cannot so determine the nature of the supersensible, we may yet think the relation between it and the world of experience by means of finite categories, provided we keep in mind that such cognition is only analogical. "Since we can never cognise these intelligible existences (*Verstandeswesen*) as they may be in themselves, but yet require to assume them in relation to the world of sense, we are at least able to think this connection by means of the notions which express their relation to the world of sense. For were we to think an intelligible existence only by the notions of understanding, we should not thereby think anything really determinate; were we to think it through properties which are borrowed from the world of sense, it is then no longer an intelligible existence; it would be thought as a phenomenon, and belong to the world of sense. . . . If we limit our judgment merely to the relation which the world may have to a Being, the very notion of which lies beyond all the knowledge we can attain within the world, then we stop at this boundary (*i.e.* that between experience and the supersensible). For then we do not attribute to the Supreme Being any of the properties in themselves, by which we represent objects of experience, and hence avoid dogmatic anthropomorphism; but we attribute them to his relation to the world, and allow ourselves a symbolical anthropomorphism, which really concerns only words, and not the object itself." *Prolegomena*, § 57 (*WW.*, III. 129, 132). Cf. close of *Kritik d. Urtheilskr.* (*Werke*, IV. 391-5).

It may be added here that the outlines of the ethical metaphysic, which is the culmination of Kant's theory of knowledge, are sketched with quite sufficient fulness and clearness in the *Critique of Pure Reason;* see *Doctrine of Method*, section II., *Canon of Pure Reason.*

[37] Kant adds in the *Grundlegung* "Humanity as End in itself," but this notion is really equivalent to that of the universal legislation of will. For it is not humanity as a concrete or aggregate that is end, but the realisation universally of rational freedom. See on this point Cohen, *K.'s Begr. d. Ethik*, pp. 195-6.

[38] See on this notion of practical Freedom, *Grund. d. Met. d. Sitten.* pp. 100-101.

[39] For this double position of humanity, see *Grundleg. d. Met. d. Sitten.*, pp. 110-2. It is the origin of the special *contingency* which leads, through the idea of end, to the ethical postulates. See *Kritik d. Urtheilskr.* § 75 (*Werke*, IV. p. 294).

[40] References for this are scarcely requisite. The following is perhaps the strongest expression of Kant's doctrine :—"It is very remarkable, however, that among *Facts* there is to be found one Idea of Reason (which in itself cannot have an adequate exposition in Intuition, and consequently cannot be theoretically proved to be possible). This is the Idea of Freedom, the reality of which, as a special mode of causality, may be shown through the practical laws of pure Reason, and, in con-

formity thereto, in real actions, consequently in experience. This then is the only one of all the Ideas of pure Reason, the object of which is a *Fact*, and must be included among *scibilia*." *Kritik d. Urth.* § 90, *Werke*, IV. p. 375).

[41] *Kritik d. prak. Ver.* pp. 52-3. Cf. *Vorrede*, p. 5 *n*, where Freedom is called the *ratio essendi* of the moral law, while the moral law is the *ratio cognoscendi* of Freedom. Cf. *Krit. d. prak. Ver.* pp. 55-6, and 79. There is a remarkable note on *Reason* and the moral law in the *Religion inner. d. Grenzen. d. blossen Ver.* (*Werke*, X. p. 27 *n*).

[42] See, *inter alia*, *Religion inner.*, etc., *Werke*, X. pp. 56-7 *n*. Cf. Fichte, *Werke*, IV. p. 53.

[43] See *Krit. d. prak. Ver.* pp. 185-190.

[44] On the *first* of these, see generally Hegel, *Rechtsphilosophie*, § 135 ; and for more elaborate treatment the very clear essay in Mr. Bradley's *Ethical Studies*, pp. 128-145, and the remarks of M. P. Janet, *La Morale*, *Liv.* I. c. 2 ; on the *second*, see Fichte, *Sittenlehre* (*WW.*, IV.), pp. 131, 150, 209 ; on the third, see Schiller's well-known essay, *Ueber Anmuth und Würde* (specially pp. 353-8, *Werke*, XI., *Cotta*, 1847), and generally Garve's prolix essay (*Ethik des Aristoteles*, I. 318-95.) With the remarks of Schiller, however, there should be compared Kant's well-grounded reply, *Religion innerhalb*, etc. (*WW.*, X. p. 23 *n*).

[45] See *Krit. d. prak. Ver.* 100-16, 192-5.

[46] *Ibid.* 219-26. See also *Krit. d. Urtheilskr.* §§ 86-88.

[47] See *Krit. d. Urtheilskr.* (*WW.*, IV.), pp. 382-3. Cf. *Werke*, I. 540-2.

On the nature of these Postulates and the necessity attaching to them, see *Krit. d. prak. Vern.* pp. 256-59, and *Vorrede*, pp. 22-3 *n.* Cf. *Krit. d. Urtheils.* (*WW.*, IV.), pp. 376-8.

[48] It is grave injustice to Kant to represent him as resting the belief in the Immortality of the Soul and the existence of God on the merely prudential ground that they are useful for moral purposes. Mr. Huxley, who goes even further, seems to me altogether to reverse Kant's position, and to regard him as retaining these beliefs in order to give foundation for morality. He writes (*Hume*, p. 181):—"Kant adds, as you cannot disprove the immortality of the soul, and as the belief therein is very useful for moral purposes, you may assume it. To which, had Hume lived half a century later, he would probably have replied, that, if morality has no better foundation than an assumption, it is not likely to bear much strain; and if it has a better foundation, the assumption rather weakens than strengthens it." It seems probable that Mr. Huxley is misled by his own term *morality*, which may either mean *moral law* or *moral disposition*, *i.e.* the strength of purpose conformable to moral law in the individual. It is to the latter that Kant refers in the passage quoted by Mr. Huxley, whereas Hume's hypothetical answer seems to refer to the former. It jars upon one to have Kant even apparently credited with the doctrine that ethical theory is founded on the religious or theological postulates.

Mr. Huxley is equally unjust to Kant in his remarks upon the doctrine of noumenal liberty (*Hume*, 196). It is an old objection that is there advanced (see *e.g.* Garve, *Ethik d. Aristot.* I. 218, and Lange, *Ges. d. Mat.* II. p. 60), and one of such simplicity that Kant may be credited with not having overlooked it. It has no force for any one who does not accept the doctrine that the mechanical or phenomenal is self-explaining.

[49] See for remarks on the relation between the results of the two *Critiques*, *Kritik d. prak. Ver. Vorrede*, pp. 8, 9, 12, and cf. p. 190.

[50] There are many literary difficulties connected with the *Kritik der Urtheilskraft*, on some of which a remark may be permitted.

(1) As to its contents. How does it happen that the consideration of Æsthetics and of Teleology are united? So far as the expressions of Kant's own opinion are concerned, we should say that the Critique of Taste forms one distinct work, with principles of its own, and not in any way effecting the junction between Speculative and Practical Reason which Kant desired. (That the Critique of Taste is the peculiar subject of the third *Kritik*, see *Werke*, I. 611, 614-5; IV. 21; XI. i. p. 87. That the reflective judgment, and therefore the notion of "formal adaptation," belongs to the Kritik of Pure Reason (see *Werke*, I. 611; IV. 240). It appears, then, that Kant was led to unite æsthetics and teleology for two reasons; *first*, in both, judgment was the faculty (see *Werke*, I. 608-610); and *second*, there appeared to be some natural relation between Judgment and Feeling (see *Werke*, I. 587-8: "Now the faculty of cognition according to notions has its *a priori* principles in pure understanding (*i.e.* in its notions of Nature); the faculty of will in pure Reason (*i.e.* in its notion of Freedom), and there yet remains of the faculties of mind in general a mediating faculty or receptivity, to wit, Feeling of Pleasure and Pain; while, also, of the higher

powers of cognition there remains a mediatory one, the faculty of Judgment. What is more natural than to suspect that the one may contain *a priori* principles for the other ?")

(2) The classification of kinds of "Adaptation" (*Zweckmässigkeit* = conformity to End) is rather confusing. Kant distinguishes *first*—*Formal Adaptation*, *i.e.* the general principle that the empirical particular must harmonise with the employment of understanding ; *second*, Subjective or Æsthetic Adaptation, where the ground of judgment is a feeling ; *third*, Objective Adaptation, where objects, or parts of objects, are in relation to one another as means and ends. Under the third, again, he distinguishes a Formal Teleology from a Material or Real. In the first, the teleological arrangement is not one in which actual causal relation is involved, *e.g.* the variety of properties in a geometrical figure ; in the second, the objects or parts are causally related. Of this second, the material objective adaptation, Kant finally distinguishes external from internal. The greatest difficulty is caused by the want of perfectly definite statements with respect to the relation of these several kinds, specially as to the relation between Formal Adaptation, and Material Objective Internal Adaptation. See *note* 54 to this Lecture.

[51] *Kritik d. Urtheilsk* (*WW.* IV.) p. 14.

[52] *Ibid.* p. 38.

[53] The general nature of the reflective judgment is quite sufficiently indicated in the passages where it is formally defined : *Werke*, I. 591-4 ; IV. 17. Its necessity arises from the fact, which is invariably present to Kant's

mind, though it is not always brought into sufficient prominence, that in all thought, all cognition, a universal is imperative. We must have some principle, some general rule, if we are in any way to think the particular. In the transcendental judgment, or determining judgment, universal and particular are given together,—the nature of the particular is determined; for it must be *so* qualified, in order to be matter of cognition at all. In the reflective judgment the particular, not simply or in the abstract, but of varied kind, is given in sense-perception, and its variety of kind must, in order to be cognised, be brought under some unity. This unity, supplied by judgment itself, is the idea of adaptation of the particular to the faculty of cognition. Now, if we examine what Kant points out as the critically justified substitute for the third transcendental idea, the principle for the regulative use of the Idea, we shall find that it is identical with the *specification* of Nature, which is the principle of reflective judgment (cf. *Kritik,* pp. 437-9, with *Werke,* I. 17-18). The three special laws into which Kant, in the *Critique of Pure Reason,* expands the general principle of the formal adaptation of Nature, are called expressly "Maxims of the Faculty of Judgment" in the later work (*Werke,* IV. p. 20). The principle of the hypothetical use of reason, and of the reflective judgment, are described in precisely the same terms as *subjective,* merely *logical,* but at the same time *transcendental.*

It is to be noted, however, not only that judgment generally, but that the reflective judgment in particular, covers more than what is included under the hypothetical use of reason in the *Critique of Pure Reason.*

[54] It is evident that no new *principle* is involved in

the teleological judgment on organisms; but it is not at once clear from Kant's method of statement how formal and objective teleology are related to one another. That the difference consists only in the empirical conditions of organisms is, I think, sufficiently brought out in the following passages: *Werke*, I. 594-5, 609, 613; IV. 260, 285; VI. 386-7. Of these I shall quote only one, which appears the most definite (*WW*. I. 609): "In the same way it must be granted that the teleological judgment is based on an *a priori* principle, and is otherwise impossible, even although we discover the Natural End expressed in such judgments only through experience, and, apart from experience, could not cognise the very possibility of such things. In other words, the teleological judgment, even though it connects with the idea of the object a definite notion of an End, which it assigns as ground of the possibility of certain natural products (which is not the case in the æsthetic judgment), is nevertheless only reflective like the other." Empirically we discover certain collocations of mechanism, not, so far as we can judge, explicable by mechanical laws. Our judgment upon these is a special application of the general principle of reflection. See on the generality given to the judgment on particular forms, I. 613.

[55] That purely scientific considerations never lead to any justification of external teleology, see *Werke*, IV. 250. For the relative justification of such teleology, when development of a being under moral law is recognised as supreme end, see *Werke*, IV. 344, 399.

[56] That we are empirically ignorant of how organisms should be mechanically possible, see *Krit. d. Urtheils.*

(*Werke*, IV.), 261, 275-6, 277, 285, 290, 300-301 ; that *only* organisms display inner conformity to End, see *ibid.* pp. 259, 263, 268.

[57] *Kritik d. Urtheilskr.* §§ 63, 64 (*Werke*, IV. 252-9). Cf. *Werke*, VI. 385.

[58] Kant undoubtedly asserts the absolute impossibility of any finite intelligence comprehending the mechanical generation of Organisms. See *Werke*, IV. 290, 301, 308. Passages to the same effect, from the earlier works, are collected in Schultze, *Kant u. Darwin* ; but they are unimportant. The ground for Kant's statement, *viz.*, that cognition or reason demands necessity, and that, in order to see the necessity of empirical detail we require insight into the supersensible, should not be overlooked. Organisms appear to Kant special examples of empirical contingency. See *Werke*, IV. 240, 252, 288.

[59] See specially *Krit. d. Urtheilskr.* § 77 (*Werke*, IV. 305-9) and § 81 (*Ibid.* p. 325-6).

[60] References for what is here said are given in *note* 54, *above.*

[61] See *Kritik d. Urtheilsk.* §§ 75, 76. Cf. Appendix II.

[62] The curious manner in which Kant, by anticipation, contemplates the explanation of varieties in organisms by mechanical and physiological causes is commented on by Haeckel (*Nat. Hist. of Creation, Lect.* V.), by Schultze, (*Kant u. Darwin*), and by Stadler (*Kant's Teleologie*). The most important passages are decidedly those in the *Critique of Judgment*, §§ 79 and 81 (*Werke*, IV. 312-5, 322-5). So much at least seems clear, that Kant would maintain (1) the impossibility of mechanically, or by inorganic causes,

explaining life; and (2) the necessity of certain original differences of forms, certain *Keime*, upon which circumstances may operate. Both assertions, however, are founded on experience only. (See for (1) *Werke*, IV. 313 *n*; for (2), *Werke*, VI. 321-2).

[63] *Werke*, VI. 382-3.

[64] *Werke*, IV. 344.

[65] *Kritik d. r. Ver*. p. 538.

NOTES TO LECTURE IV.

[1] Something has already been indicated as to Kant's view of Psychology. The two following passages are very instructive: *Kritik*, pp. 557-8 ("What place remains, then, for empirical Psychology, which has always claimed to be part of Metaphysic, and from which, in our time, such important philosophical results have been expected, after the hope of achieving something satisfactory by the *a priori* method had been given up? I answer: It must be placed by the side of empirical physics, *i.e.* physics proper, as belonging to *applied* philosophy, for which pure philosophy contains the *a priori* principles. With the latter, then, applied philosophy is connected, but is not to be identified with it. Empirical Psychology must therefore be entirely banished from Metaphysic, and, indeed, is excluded by the very idea of that science"); and in the letter to Sömmering *Ueber das Organ der Seele* (*WW*. VII. 1, p. 119 *n*): "By *Mind* (*Gemüth*) there is only to be understood the *faculty* of combining given representations, and so producing unity of empirical apperception (= *animus*), not the substance (*anima*) as in nature altogether distinct from matter, to which we do not attend. Whence we may draw the conclusion that in dealing with the thinking subject we do not touch upon the province of metaphysic, unless we have to consider pure consciousness and its *a*

priori unity in the combination of given representations, *i.e.* Understanding; but that, while we remain within the sphere of physiology, we have only to consider the faculty of imagination, for the intuitions of which (even when the object intended is absent, *i.e.* empirical representations), corresponding impressions on the brain (the proper *habitus* of reproduction), belonging to a whole of inner intuition of self, may readily be allowed.") Cf. *Ibid.* pp. 121-2, for Kant's opinion with respect to the metaphysical importance of physiological psychology.

[2] See generally for this, *Kritik*, pp. 510-7, 551-9, and *Vorrede* to *Met. Anfangsgr. d. Naturwiss.*

[3] "A stage of natural science may indeed be contemplated in which the whole world process would be represented by a single mathematical formula, by one immense system of simultaneous differential equations, in which would be given the position, direction of motion, and velocity of every atom in the universe at every instant of time."—Du Bois-Reymond, *Grenzen des Natur-Erkennens*, p. 5.

[4] A good example of this merely mechanical or metaphorical fashion of regarding sensation, and of the curious conclusion to which it may lead, is furnished by Mr. Huxley's emendation of Hume. The only certainty for Mr. Huxley is "the momentary consciousness we call a present thought or feeling," and a momentary consciousness can exist in a mind which is absolutely devoid of everything save that one impression. "When a red light flashes across the field of vision there arises in the mind an 'impression of sensation' which we call red. It appears to me that this sensation, red, is a something which may

exist altogether independently of any other impression or idea, as an individual existence."—(*Hume*, pp. 55, 68.) Naturally for Mr. Huxley, the relations under which individual existences are thought must likewise result mechanically; they, too, are impressions, or "a kind of impressions of impressions."—(*Hume*, p. 69.) Oddly enough, there seems to be no sufficient cause for these impressions of impressions. Each impression mirrors, or is the result of, a single impact, but when "two impressions of equal figures are present, there arises in the mind a *tertium quid*, which is the perception of equality" (p. 71).

Naturally, Mr. Huxley will not allow any distinction between an effect and the consciousness of an effect; "there is only a verbal difference between having a sensation and knowing one has it. . . . But the pure metaphysicians make great capital out of the ambiguity."—(*Hume*, p. 73.)

It is very interesting to find that while Mr. Huxley traces the errors of metaphysicians to the distinction, foolishly regarded by them as significant, between sensation and consciousness of sensation, Mr. Herbert Spencer discovers that the source of metaphysical confusions has been the "confounding two quite distinct things—having a sensation, and being conscious of having a sensation."—(*Pychology*, II. § 405.) Nay, Mr. Spencer thinks that apart from clear distinction between subject and object, it is not possible for any intelligence to be conscious of a *sensation as such*.—(*Ibid.* p. 373.)

[5] Vaihinger, *Hartmann, Dühring, und Lange*, 1876, p. 217. This is a very interesting work, specially as showing the full significance of the principles only thrown out in unsystematic fashion by Lange. Frequent reference will be made to it, as giving a trustworthy summary of

Lange's views. For another summary, see M. Nolen's articles, *Rev. Philos.*, 1877, October and December.

[6] In this opinion of the merits of Lange's work I am happy to agree with Professor A. Lasson and Professor Flint, see *Phil. Monatshefte*, 1877, p. 225, and *Antitheistic Theories*, 1879, p. 459.

[7] Vaihinger, *op. cit.* p. 18. Cf. generally the concluding section of the *Gesch. d. Mat.*, "Der Standpunkt des Ideals."

[8] This organic impulse is called by Vaihinger "æsthetic, ideal, architectonic, and synthetic." See *op. cit.* p. 18. "Speculation ist ein Erzeugniss des æsthetischen, idealen, architectonischen, synthetischen Triebes."

[9] See Mr. Spencer's *First Principles*, pp. 89, 161.

[10] This is fully recognised, in an indirect fashion, by Mr. Spencer. See, among other passages, *Psychology*, II. pp. 493-4, and generally *Psychology*, Pt. ii. ch. 3.

[11] *Ges. d. Mat.* II. p. 5, and p. 3.

[12] See *Kritik der reinen Vern.* p. 63, especially the *note* containing passage from 1st edition.

[13] See Vaihinger, *op. cit.* p. 23.

[14] See *Ges. d. Mat.* II. pp. 49-50.

[15] *Ges. d. Mat.* II. pp. 410-411. Cf. Vaihinger, p. 57 *et seq.*

[16] *Ges. d. Mat.* II. p. 423.

[17] Perhaps this is specially noticeable in Mr. Herbert Spencer. Apart from the particular obscurity attaching to what Mr. Spencer designates as the "object," we find constant reference to an environment which gives rise to the

various modifications of consciousness. Such environment is only a conceivable ground of explanation if it be itself differentiated or variously constituted; and, in fact, all explanations of particular states of consciousness, by reference to objective causes, implicitly assume that these causes are constituted in themselves as we know them. Yet, when Mr. Spencer has to deal with the ultimate ground for the whole series of states, subjective and objective, we find him constant in the assertion that this must be regarded as unknown and unknowable. It is sufficiently clear that the unknown and unknowable is not the cause to which reference is made when tracing the correlations involved, according to Mr. Spencer, in psychological analysis. We cannot, at the same time, hold that it is impossible to qualify a known state as a mode of consciousness without reference to a something not itself such a mode, and also hold that known modifications of the organism and external real phenomena are the correlates of states of consciousness.

It may be added that many of Mr. Spencer's utterances when dealing with the problem of Idealism have a significance hardly reconcilable with the general principles of his philosophy. His transfigured Realism, in particular, is a remarkable metaphysical doctrine.

[18] *Ges. d. Mat.* II. pp. 29 and 32.

[19] *Ges. d. Mat.* II. p. 33.

[20] *Ges. d. Mat.* II. p. 36.

[21] *Ges. d. Mat.* II. pp. 44-5.

[22] See the passage quoted from Kant in *note* 1 to this Lecture.

[23] *Ges. d. Mat.* II. 374.

[24] See *Ges. d. Mat.* II. 374-5, 427-8. Spencer, *Pr. of Psychology*, I. 627.

It is to be observed that in forms of psychological Monism represented by Lange, subjective states of consciousness are viewed as effects, while the objective states, their causes, are at the same time viewed as modes of consciousness. This is only possible because of a confusion between the objective processes and our knowledge of them. They are really treated as something over and above the subjective states, but so soon as the question is raised, What constitutes the difference ? it is declared that no difference exists. In the following passages, which I select from Mr. Huxley as from one who is always clear and precise, this ambiguity is very distinct :—

"The 'collection of perceptions' which constitutes the mind is really a system of effects, the causes of which are to be sought in antecedent changes of the matter of the brain, just as the 'collection of motions,' which we call flying, is a system of effects, the causes of which are to be sought in the modes of motion of the matter of the muscles of the wings."—*Hume*, 78.

"Therefore, if we analyse the proposition that all mental phenomena are the effects or products of material phenomena, all that it means amounts to this : that whenever those states of consciousness which we call sensation, or emotion, or thought, come into existence, complete investigation will show good reason for the belief that they are preceded by those other phenomena of consciousness to which we give the names of matter and motion. All material changes appear, in the long run, to be modes of motion ; but our knowledge of motion is nothing but that of a change in the place and order of our sensations, just as our knowledge of matter is restricted to those feelings of which we assume it to be the cause."—80-81.

"For anything that can be proved to the contrary, there may be a real something which is the cause of all our impressions; that sensations, though not likenesses, are symbols of that something; and that the part of that something, which we call the nervous system, is an apparatus for supplying us with a sort of algebra of fact based on those symbols. A brain may be the machinery by which the material universe becomes conscious of itself. But it is important to notice that even if this conception of the universe, and if the relation of consciousness to its other components should be true, we should, nevertheless, be still bound by the limits of thought, be still unable to refute the arguments of pure idealism. The more completely the materialistic position is admitted, the easier is it to show that the idealistic position is unassailable, if the idealist confines himself within the limits of positive knowledge."—81-2.

Now, since it can hardly be imagined that any of these writers regard states of consciousness as other than the subjective modes of the individual, it would follow that every physical process is at the same time a change in the subjective modes of some individual consciousness. Surely this is the very insanity of Idealism. Mr. Huxley escapes by speaking of our *knowledge* of motion as if it were distinct from motion, but it is doubtful if he could retain such distinction. The question is simply, Are the objective processes which we, by scientific observation, discover to be the concomitants of subjective states, at the same time causes of these states, and themselves states? Only one writer, so far as I am aware, has freed himself from the difficulty, by maintaining that conscious states are not states of the individual, that they are neither objective nor subjective. This is Mr. Shadworth Hodgson's doctrine, as expounded in his able work, "*Philosophy of Reflection.*" It would be unbecoming to offer any brief comment on a work which deserves elaborate treatment, but I must remark that only the peculiarity of Mr. Hodgson's terminology disguises the substantial agreement in his mode of thought with philosophers from whom in words he appears to dissent.

[25] See a very valuable section on Monism in Lotze's *Medicinische Psychologie*, pp. 45-55.

[26] *Ges. d. Mat.* II. 427.

[27] Although I do not agree with Mr. S. H. Hodgson in his method of stating the distinction between the *Nature* and the *History* of a fact, his remarks are very important. See *Phil. of Reflection*, I. 226-7.

[28] On the caution with which the notion of End must be applied, see Lotze's *Allgemeine Physiologie*, pp. 48-57. A very good statement, of Kantian tendency, is given in Mr. Herbert's *Modern Realism Examined*, pp. 385-8.

[29] *Ges. d. Mat.* II. 55-6, 61, 177-8, 493-4, 540, cf. Vaihinger *op cit.* pp. 18, 56, 105.

APPENDIX I.

KANT'S REFUTATION OF IDEALISM.

The "Refutation of Idealism" seems to have presented unusual difficulties to critics of Kant's theory. In a recent communication to *Mind* (July 1879, pp. 408-410), Mr. Henry Sidgwick analyses the argument, and insists that in it Kant, perhaps unconsciously, imagined himself to prove the existence of Noumena, or, rather, identified the real thing in space with the unknown ground of the phenomenal world. When such a view can be held as following from certain expressions in the "Refutation," it becomes of importance to point out exactly what it was Kant imagined himself to be discussing. Quite possibly misunderstanding of the "Refutation" results from some misconception as to the question at issue.

I do not myself at all comprehend why Mr. Sidgwick should use the expression "objects in space outside our bodies," for no such distinction appears in the "Refutation," and it must be evident to any one who considers the Kantian formulæ, "inner and outer experience," that externality to our bodies has no pertinence. But without discussing this, I would point out that the "Refutation" can only be understood when its place in the *Kritik* is taken into account. In the second edition it appears in connection with the postulates of empirical thought, and is introduced as supplementing the distinction which is there drawn between possible and real. According to Kant, the element of reality in experience is necessarily that furnished in empirical intuition by perception, or in its purest form, sensation. Although the complete object or thing is not perceived until the sensation is qualified by the categories (*Kr.*, p. 195-6), yet in order that there should be real cognition at all, there must of necessity be an element of sensation, a *given* impression, something not produced by the subject, not developed by the laws of his imagination. But, it occurred to Kant, to assert this in respect to real external existences is to presuppose that there is external perception, that is to say, is to suppose that inner and outer experience, cognition of the existence of external phenomena and of my own existence, stand on the same level. Now, Cartesian or problematic idealism had always insisted that none other than determinations of my own existence are immediately known. (Notice that the question is not of *Vorstellungen*, which give no cognition, but of determination of existence.) According to that theory, therefore, external perception, determination of the existence of real things in space, would be simply a phase of inner experience *plus* an inference to externality. So far as determination of external objects is concerned, *imagination* not *perception*, would be the essential factor. Now Kant is emphatic in pointing out that here, *and here only*, lies his problem. He desires to prove that determination of my own empirical existence is impossible apart from a given real fact of external perception, an empirical intuition of outer sense, *i.e.* sensations determined through the category of substance, and cognised as really existing. He is not in any way dealing with the *thing-in-itself*, but with the existence of external phenomena, and is only desirous to make perfectly clear that for this a *given* real impression or real external perception is imperatively required. When, therefore, in the *Proof* he uses the expression *Vorstellung eines Dinges* ausser mir* in contradistinction to *Ding ausser mir*, he is aiming solely at the difference between imagination and perception. (The distinction between *thing* and *representation or notion of a thing*, is not uncommon in Kant, and never, so far as I am aware, has any reference to the question of *Noumena*, but always to the relation of actual and possible in experience.) The note to the first remark in the *Proof* should have prevented any confusion on this head.

It is well known, moreover, that the refutation of Idealism is substantially contained in the *Critique of the Paralogisms* as it appeared in the first edition of the *Kritik*, and the mode in which it is there introduced can leave not the slightest doubt as to its true significance. The context is by far the best commentary on the *Proof* as in the amended form. It is true that to any one who does not sufficiently appreciate the Kantian doctrine of the thing-in-itself, expressions such as *reality of external things*, *bodies made known to us in perception*, *representation of reality*, may appear ambiguous. In the treatment of the *Paralogisms* as in the first edition, the most satisfactory explanations are given of all these, together with the most explicit statement that the thing-in-itself is not in any way involved in the problem. From Kant's classification of idealistic theories there given, and his discussion of Cartesianism, it is sufficiently plain how simple is the theorem he is desirous of proving. That a *given*, not self-produced, element of sensation is involved in external perception, and that this is the *real* factor in perception ; such is the substance of his theory, whatever may be thought of its truth or consistency.

APPENDIX II.

KRITIK DER URTHEILSKRAFT, § 76.

SUCH frequent reference is made in the third lecture to § 76 (77 in Hartenstein's edition) of the *Kritik der Urtheilskraft*, that I have thought it well to give here a translation of it. The doctrines contained in it may be found more briefly expressed in various parts of the work, and the section itself appears to me a good specimen of Kant's over-elaboration. It contains, however, the official discussion of a very important element in the critical theory of knowledge, and the substance of Kant's teaching on the difficult notion of End in Nature.

In the preceding sections Kant had expounded the Antinomy of the teleological judgment, and had solved it by drawing the distinction between dogmatic assertion with regard to the generation of organic products and the critical principle of judgment upon the same. In § 75, which is called a *Note*, he then proceeds to explain more fully the distinction between objective and subjective principles, determining and reflective judgment, and traces the origin of these distinctions to the peculiar character of our understanding. He shows in the first place that the important difference between actual and possible results from the fact that our cognition contains two heterogeneous elements, intuition and thought, and notes that in the supreme notion of speculative thought, that of the absolutely necessary ground of experience, we can attain only possibility so far as cognition is concerned. Were there not this separation between thought and intuition, were our understanding intuitive, then *to be* and *to be thought* would be synonyms. He shows further that, in the practical sphere, the notion of Obligation is also connected with the peculiarity of our nature. Here we have absolutely given the necessary universal, the law of Practical Reason, but the particular of volition is in its regard undetermined or contingent, and from this contingency arises the notion of Obligation. He proceeds lastly to apply these considerations to the matter involved in teleological judgment, thus:—

"In the same way, as regards the case we are now considering, it may be admitted that we should discover no distinction between the mechanism of nature and its *technic*, *i.e.* its teleological connection, if our Understanding were not so constituted that it must proceed from universal to particular, and consequently that the faculty of Judgment can in reference to the particular cognise no adaptation to Ends (*Zweckmässigkeit*), and so pronounce no determining judgments in that regard, unless it possess a universal law under which it can subsume the particular. But since the particular, as such, has a certain contingency with respect to the universal, while Reason nevertheless requires unity in the combination of particular laws of Nature, and therefore conformity to law (which conformity, in the case of the contingent, is called adaptation to End), and since deduction of particular laws from the universal, so far as that which is contingent in them is concerned, is impossible *a priori* through determination of the notion of the object, it follows that the notion of the adaptation of Nature in its products to Ends is one necessary for the human faculty of Judgment in reference to Nature, but not serving to determine the objects themselves; it is, consequently, a subjective principle of Reason for the faculty of Judgment, and, so far as regulative (not constitutive), is as necessarily valid for our human faculty of Judgment as if it were an objective principle."

He then proceeds in § 76 :—

"In the Note certain peculiarities of our faculty of cognition (even of the higher faculty) have been brought forward, which we are easily misled into attaching as objective predicates to things themselves. They concern, however, *Ideas,* for which no adequate object can be given in experience, and which, therefore, could serve only as regulative principles in following out experience. The same, it is true, holds good in the case of the notion of Natural-End (*End in Nature, Natur-zweck*), so far as the ground of the possibility of such a predicate is concerned, for that can only be found in the Idea; but the corresponding consequent (the product itself) is actually given in nature, and the notion of a mode of causation in the latter (as if it operated according to Ends) appears to make the Idea of a Natural-End a constitutive principle. In this respect the Idea (of Natural-End) differs from all other Ideas.

"What constitutes the difference in question, however, consists in this: that the idea contemplated is not a principle of Reason for Understanding, but for the faculty of Judgment, and is therefore simply the application of Understanding in general to possible objects of experience, —in those cases, too, in which the Judgment cannot be determining, but must be merely reflective. The object, therefore, may certainly be given in expérience, but cannot at all be judged as *determined* according to the Idea, still less as completely adequate thereto ; our judgment on it can be merely reflective.

"There is therefore involved a peculiarity of *our* (human) understanding in relation to the faculty of Judgment, in the reflection of the said faculty on things in Nature. But if so, then at the root of the matter there must lie the Idea of a possible understanding other than human (just as in the *Critique of Pure Reason* we found it necessary to contemplate another possible intuition if we were to maintain that ours was a particular species, a species, that is, for which objects are valid only as phenomena), in order that we may say ; from the special quality of our Understanding certain natural products, so far as their possibility is concerned, *must be treated by us* as generated through purpose and as Ends, although we do not thereby insist that there actually exists a particular cause determined to operate by the idea of End, and consequently do not deny that another (higher) Understanding than the human may find even in the mechanism of Nature (*i.e.* in a causal nexus for which an Understanding is not exclusively assumed as cause), the ground of the possibility of such products of Nature.

"The problem, then, is that of the relation of *our* Understanding to the faculty of judgment, *i.e.* we must try to discover here a certain contingency in the special quality of our understanding in order to note this as its peculiarity, distinguishing it from other possible Understandings.

"As might be expected, the contingency in question is found in the *particular* which the faculty of Judgment is to bring under the *universal*, given in the Notions of Understanding, for the particular is not determined by the universal of *our* (human) understanding, and it is contingent in how many ways things differing, though agreeing in a common attribute, may be presented in perception. Our understanding is a faculty of Notions, *i.e.* is a discursive understanding, for which it evidently must be contingent, of what kind, and how varied, may be the particular that is presented in Nature, and that can be reduced under its notions. But since, for real cognition, intuition is also required, and since a faculty of *perfect spontaneity of intuition* would be a faculty of real cognition distinct from and entirely independent of sensibility—consequently, would be Understanding in the most general sense—we may therefore conceive of an *intuitive* Understanding [negatively, *i.e.* merely as not discursive], which does not proceed (by notions) from universal to particular and so to individual, and for which there does not exist that contingency in the adaptation of *particular* laws of nature to understanding which renders it so hard for our understanding to reduce the multiplicity of nature to unity of cognition—a reduction which can only be effected by our understanding through the quite contingent harmony between natural attributes and our faculty of notions, but which is not required by an intuitive understanding.

"Our understanding, then, has the peculiarity in reference to the faculty of Judgment that, in cognition through it, the particular is not determined by the universal, and therefore cannot be deduced from the latter alone. Nevertheless, this particular in the multiplicity of Nature must be adapted to the universal (through Notions and Laws) in order that it may be subsumed thereunder, an adaptation which, under such circumstances, must be quite contingent, and, for the faculty of Judgment, without determinate principle.

"In order, then, that we may at least think the possibility of such an adaptation of things in nature to our faculty of Judgment (an adaptation which *we* represent as contingent and therefore as possible only because it is an *End*), we must at the same time conceive of another understanding, in reference to which, and, moreover, apart from any *End* attributed to it, we may represent as *necessary* that harmony of natural laws with our faculty of judgment, which for our understanding can be thought only through the medium of Ends.

"Now our understanding is so constituted, that in cognition (*e.g.* of the cause of a product) it must proceed from an *analytical universal* (*i.e.* from notions) to the particular (the given empirical intuition), whence, therefore, it determines nothing as regards the multiplicity of the latter, but must expect this determination for the faculty of Judgment from subsumption of the empirical intuition (if the object is a natural product) under the notion. On the other hand, we may conceive of an understanding which, not being like ours, discursive, but intuitive, proceeds from a *synthetical universal* (the intuition of a whole as such) to the particular, *i.e.*, from whole to parts. In such an understanding, then, and in its representation of the whole, there is not necessarily involved the *contingency* in the connection of parts rendering possible a definite form of the whole, which is required by *our* understanding, seeing that it must proceed from the parts as *grounds*, thought generally, to the various possible forms that may be subsumed under them, as *consequents*. From the peculiarity of our understanding, on the other hand, a real Whole in nature can be regarded only as the effect of the combined motive forces of the parts. If, therefore, we would represent to ourselves not the possibility of the whole as dependent on the parts, which is the mode appropriate to our discursive understanding, but, after the standard supplied by the intuitive (archetypal) understanding, the possibility of the parts (in regard to both their specific nature and their interconnection) as dependent on the whole, this, from the very same peculiarity of our understanding, cannot come about because the whole contains the ground of the possibility of the connection of the parts (which would be a contradiction for discursive cognition), but only because the *idea* of a whole contains the ground of the possibility of its form, and of the connection of the parts involved in this form. But since, in such a case, the whole would be an effect (a *product*), the *idea* of which is regarded as the *cause* of its possibility, and since the product of a cause which is determined to act simply by the idea of its effect is called an End, it therefore follows that it is merely a consequence of the peculiar nature of our understanding when we represent to ourselves certain natural products as possible only through another kind of causality than that of the natural laws of matter, as possible only through the causality of Ends and Final Causes, and that this principle does not concern the possibility of the generation of such things (even treated as phenomena) in this particular mode, but only the judgment upon them possible for our understanding. From this we can at the same time understand why in natural science we are far from satisfied with an explanation of natural products through Final Causes, because there we require that natural production shall be judged in conformity merely with our faculty for judging it, *i.e.* reflective judgment, and not in conformity with things themselves, with a view to the determining faculty of judgment. Nor is it at all necessary, in taking this view, to prove that such an *intellectus archetypus* is possible, but only that, as in contrast to our understanding, discursive and requiring individual representations, and in contrast to the contingency of such a peculiar quality, we are led to that idea, *viz.*, of an archetypal intellect, an idea which is not contradictory.

"Now if we regard a material whole, so far as its form goes, as being the product of the parts, their forces and power of combining themselves with one another (other materials which serve to bring these parts near to one another being understood as included), then we represent to ourselves a mechanical process of generation. But in such a fashion we do not arrive at a notion of a whole as End, the inner possibility of which throughout presupposes the idea of a whole, and on which depend the nature and mode of action of the parts; and yet in this way we must regard an organised body. Still, as has just been shown, it does not therefore follow that the mechanical generation of such a body is impossible, for this would be equivalent to saying that it is impossible (contradictory) for *any understanding* to think such a unity in the connexion of the manifold, unless the Idea (of this unity) were also its generating cause, *i.e.* unless the production were intentional (purposive). Such a conclusion would certainly be warranted if we were justified in regarding material objects as things-in-themselves. For then the unity, which is the ground of the possibility of natural formations, would be simply the unity of space, a unity, however, which is no real ground of generation but only its formal condition, although having some resemblance to the real ground we are in quest of, since in it no part can be determined save in relation to the whole (the idea of which whole is therefore the necessary condition of the possibility of the parts). But since it is at least possible to regard the material world as mere phenomenon, and to think as its substratum something as a thing-in-itself (something non-phenomenal), and, further, to supply for this a corresponding intellectual intuition (even though this is not our mode of intuition), there would then be a supersensible and real ground (though incognisable by us) of that Nature to which we ourselves belong; in which, therefore, we would treat according to mechanical laws whatever in it is necessary as object of the senses, while the harmony and unity of the particular laws and forms of this mechanism (which in regard to it must be judged by us contingent) we would also treat according to teleological laws as object of Reason (and so also with the whole of nature as a system); we would thus judge it (Nature) according to two kinds of principles, the mechanical mode of explanation not being excluded by the teleological, as though the two were contradictory.

"Hence, also, we may comprehend, what certainly might otherwise be easily suspected, but could hardly be asserted with confidence and proved, that the principle of mechanical deduction of natural products which are conformable to End may undoubtedly co-exist with the teleological, but in no way supersedes it. In other words, in the investigation of a thing which we must judge as a natural End (an organised body), we must certainly try all known and yet to be discovered laws of mechanical generation, and may hope to make good progress therein, but must never hope to be relieved from the reference to a quite distinct ground of generation, that, namely, of Causality according to Ends, in order to explain the possibility of such a product; and it is simply impossible for any human understanding (nay, for any finite understanding of kind like ours, however superior in degree) to hope to comprehend the generation of even a blade of grass by merely mechanical causes. For, if the teleological connexion of causes and effects as rendering possible such an object is quite indispensable for the faculty of judgment, even to study such objects only by the guidance of experience; if, for external objects as phenomena a sufficient cause directed towards ends cannot be discovered, but if this, which yet lies in Nature, must still be sought only in the supersensible substrate of nature, from insight into which we are, however, completely shut out, then it is simply impossible for us to obtain for teleological connexions grounds of explanation taken from nature alone, and, from the peculiarity of the human faculty of cognition, it is necessary to seek the supreme ground of these connexions in an original understanding as the cause of the world."

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